

FIG. 1A

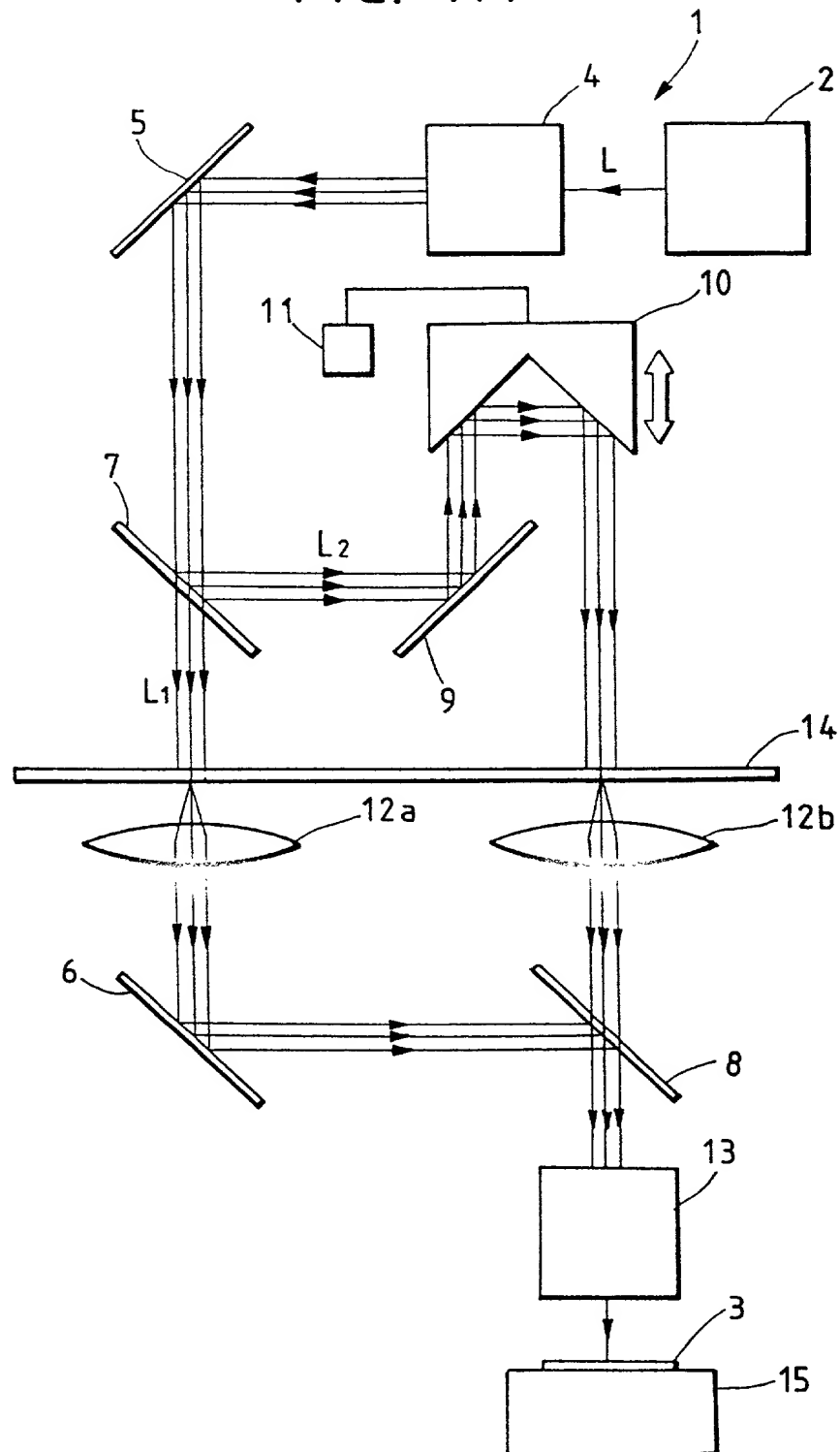


FIG. 1B

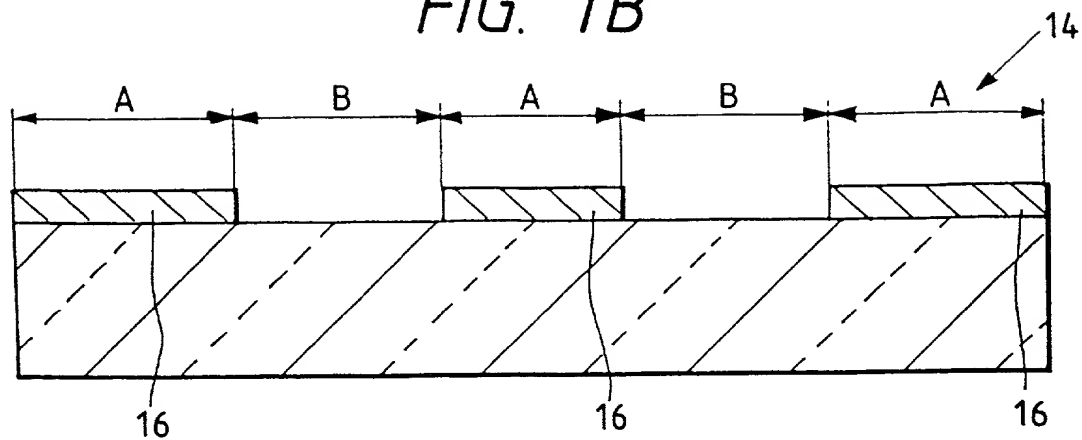


FIG. 1C

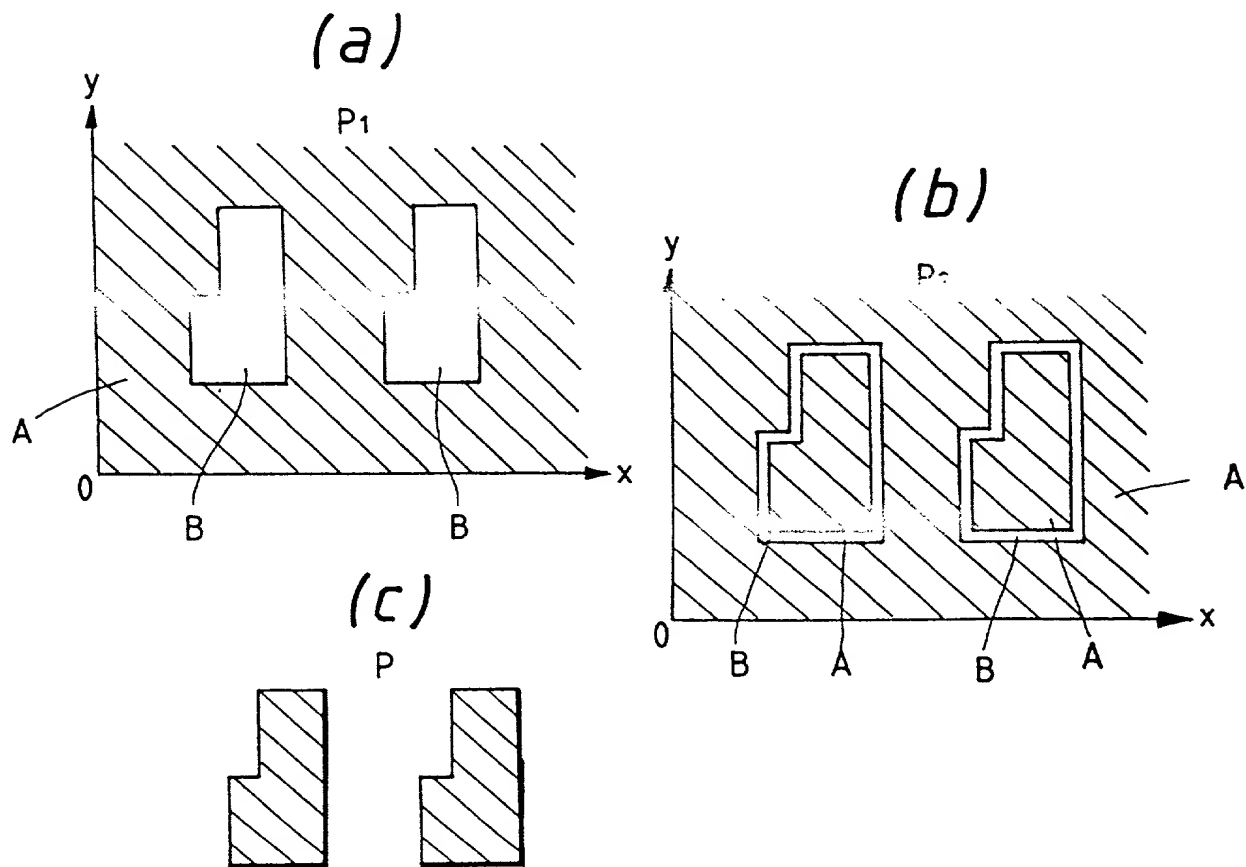


FIG. 1D

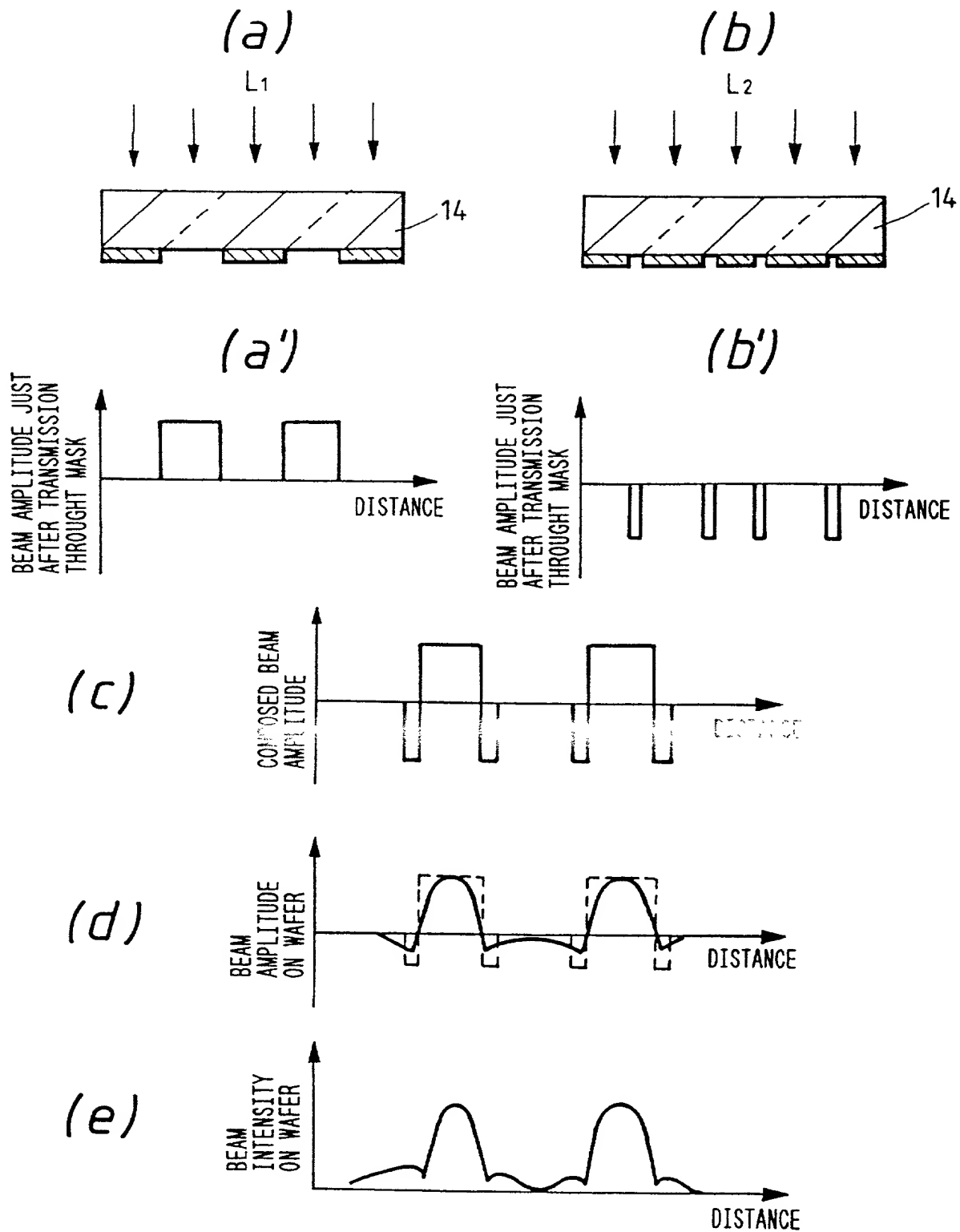
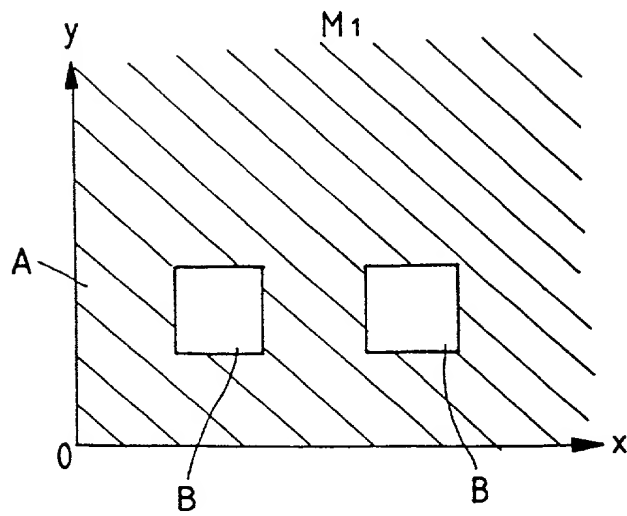
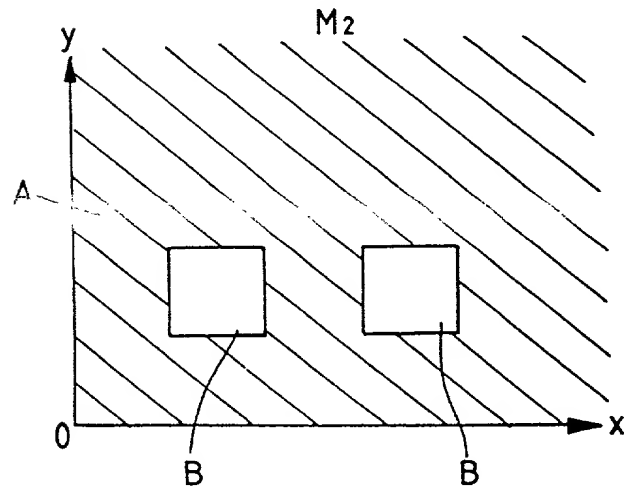


FIG. 1E

(a)



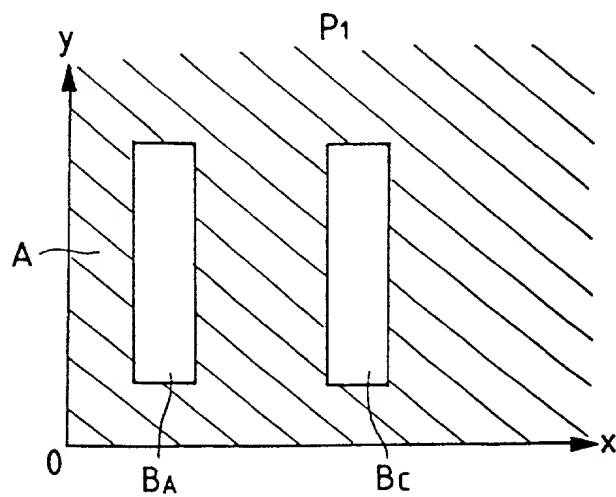
(b)



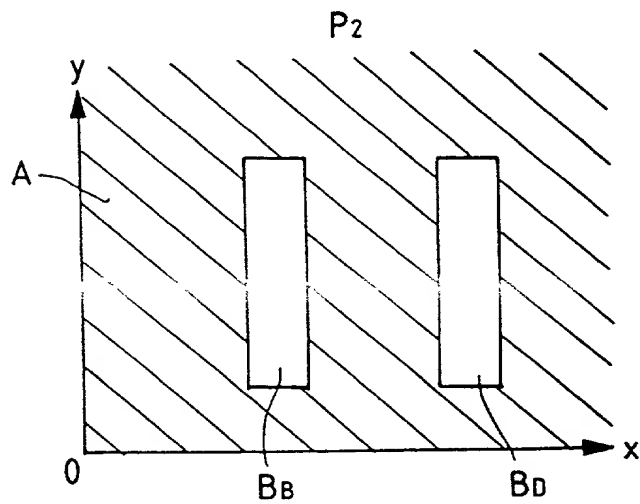
(c)



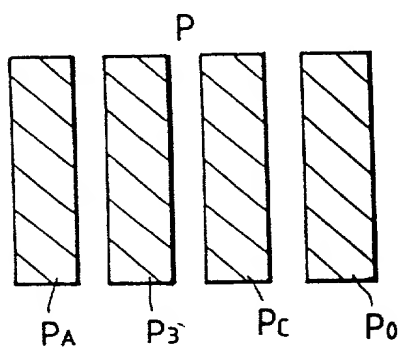
FIG. 1F
(a)



(b)



(c)



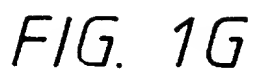
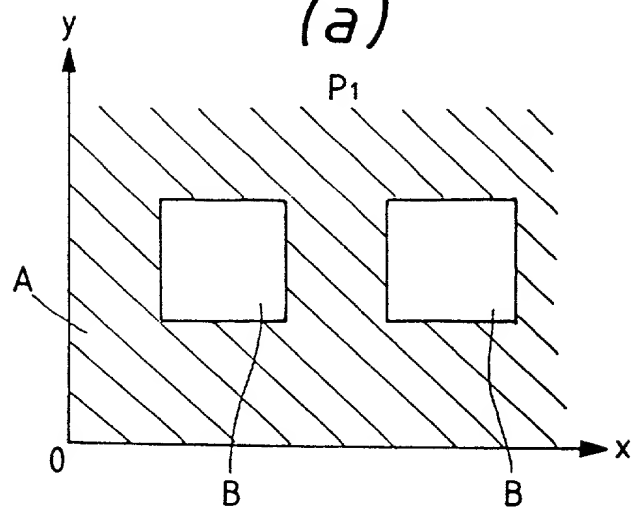
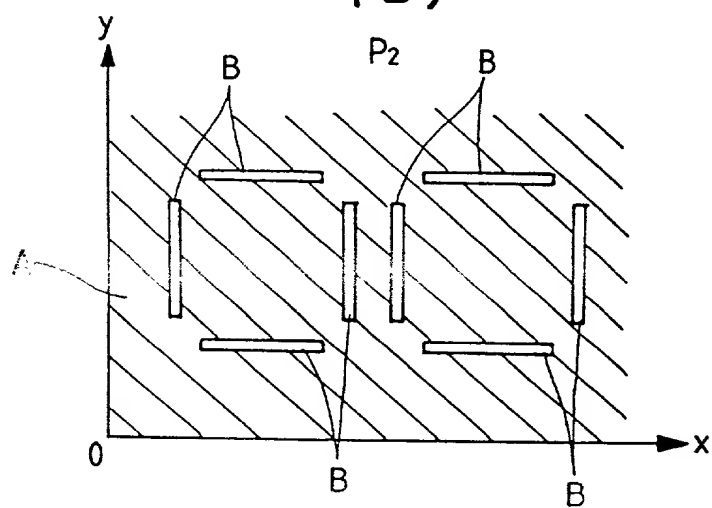


FIG. 1H

(a)



(b)



(c)

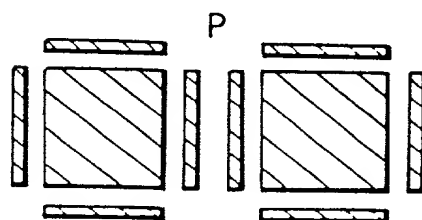


FIG. 1I

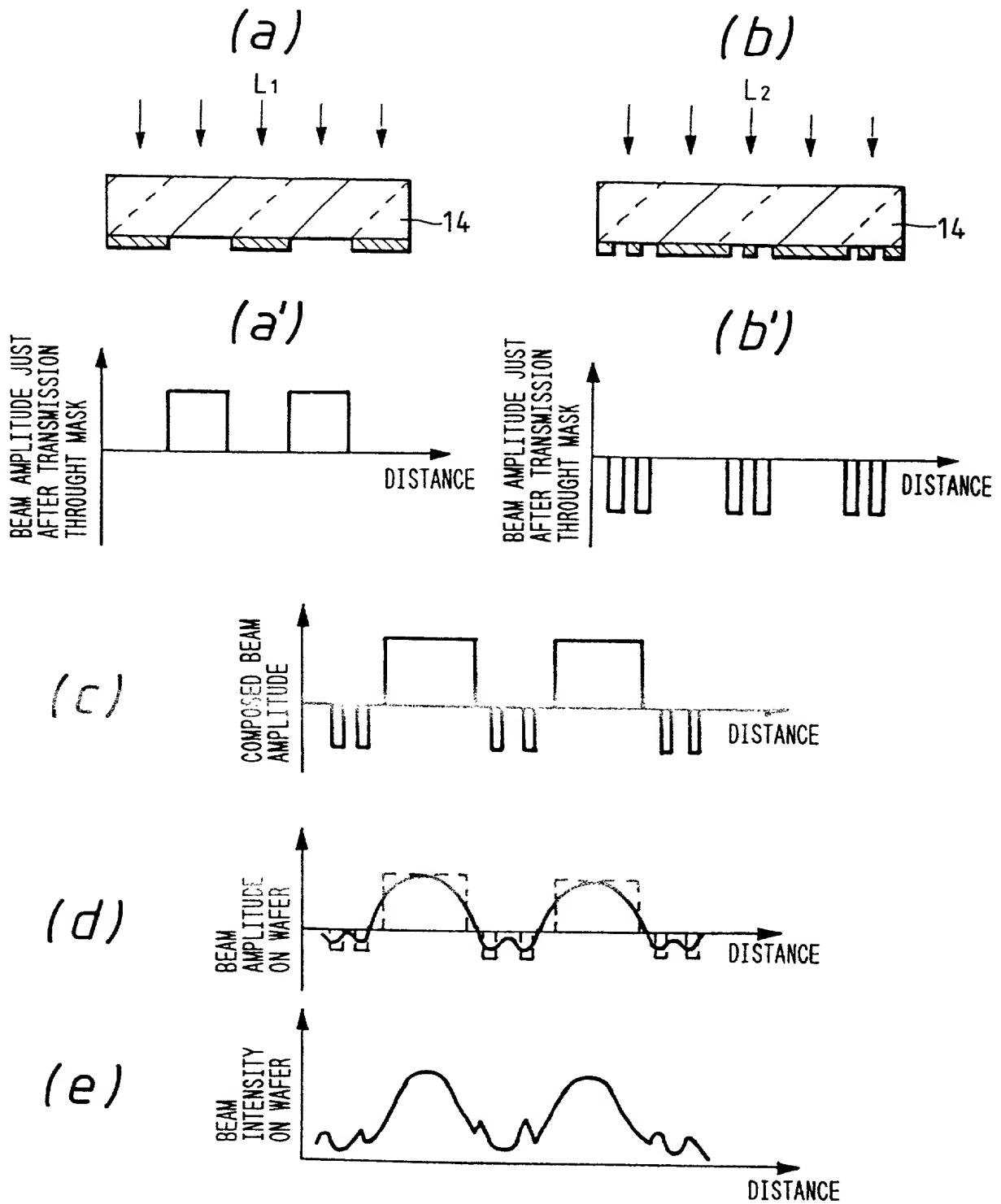


FIG. 1J

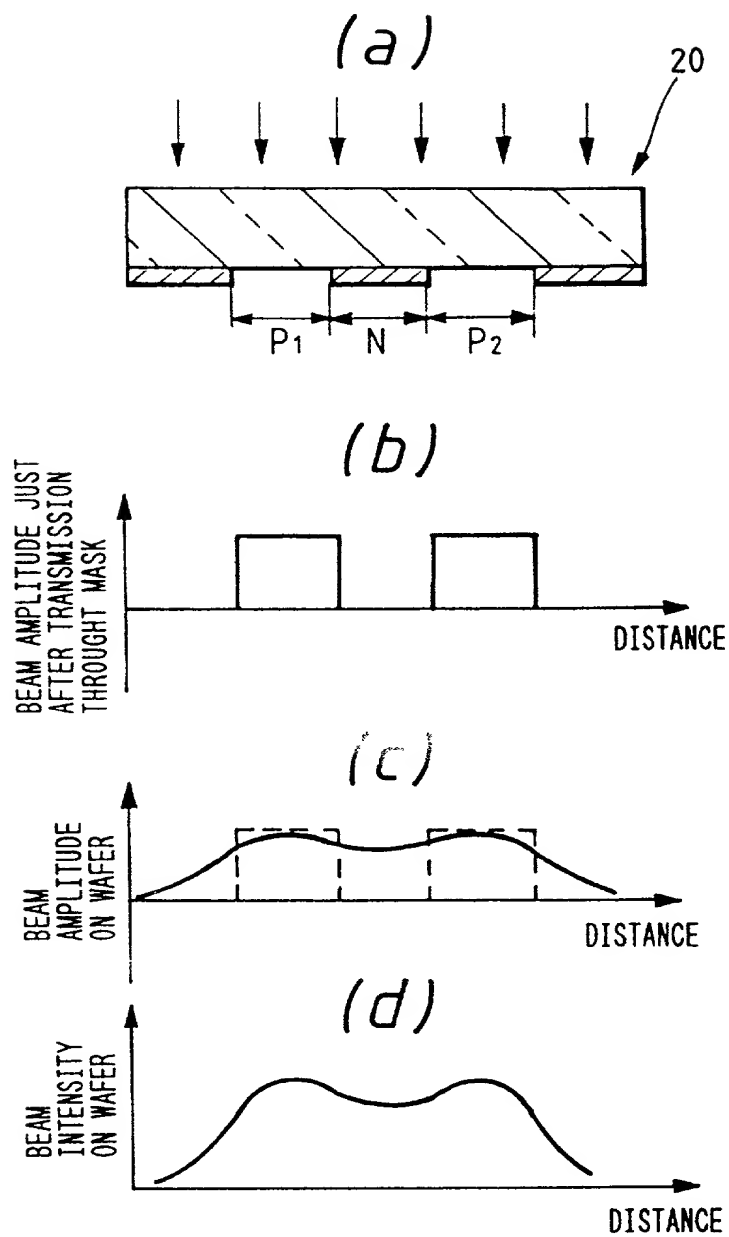
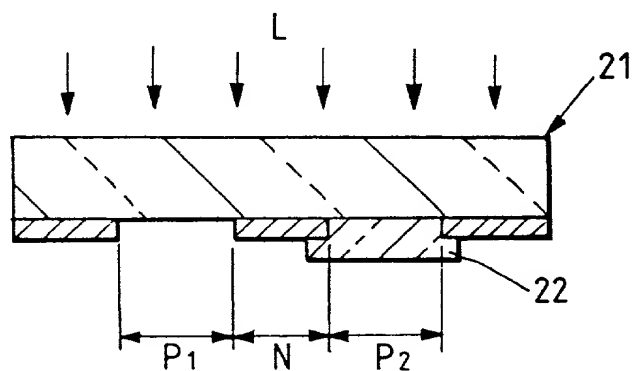
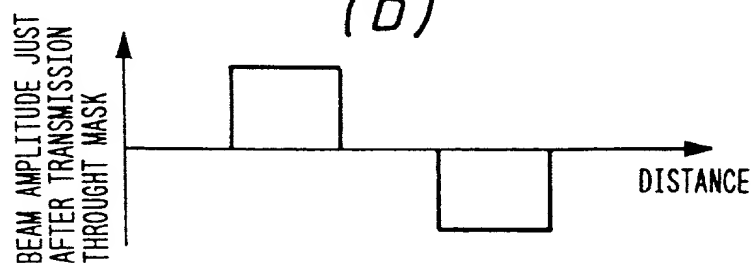


FIG. 1K

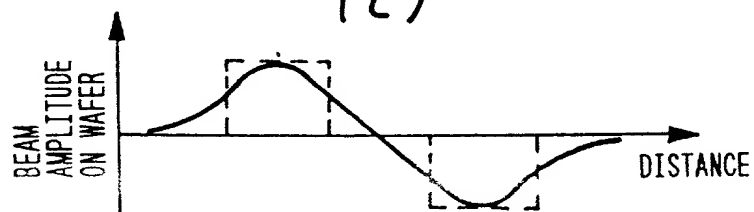
(a)



(b)



(c)



(d)

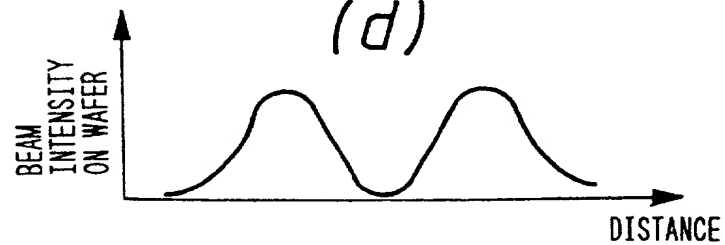


FIG. 2A

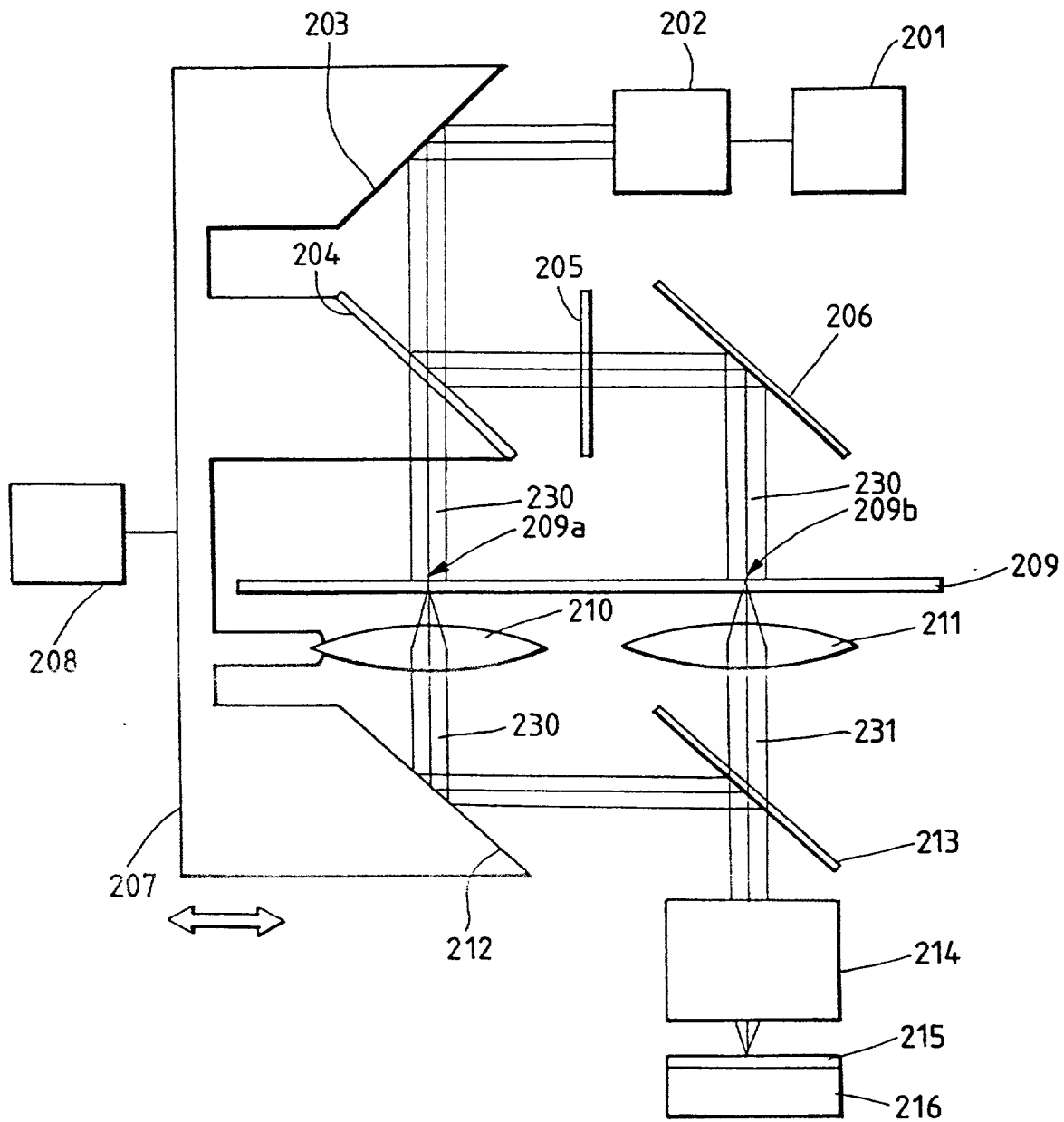
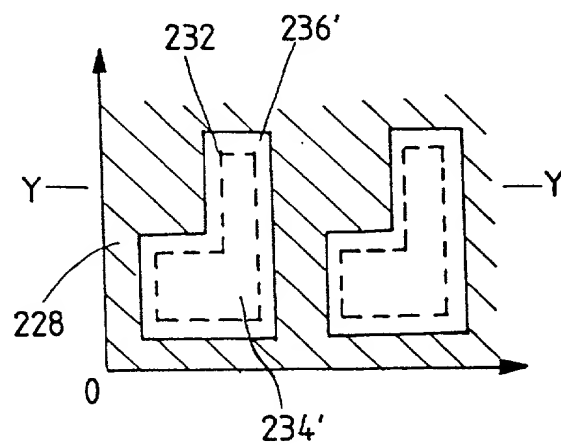
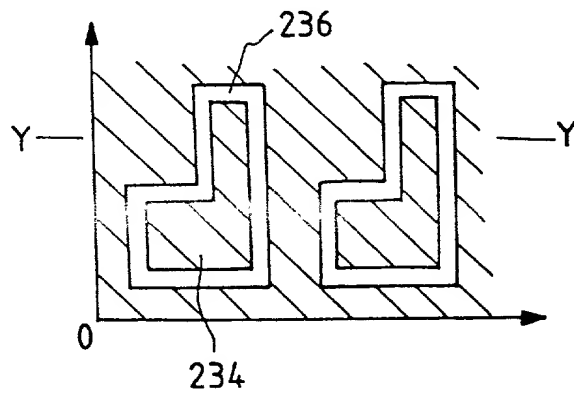


FIG. 2B

(a)



(b)



(c)

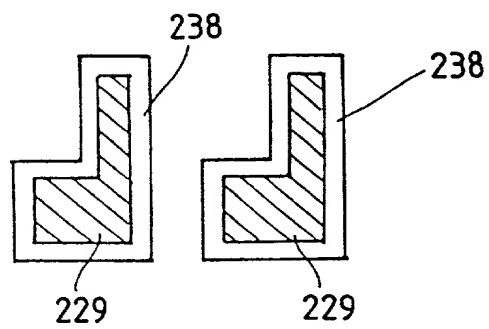


FIG. 2C

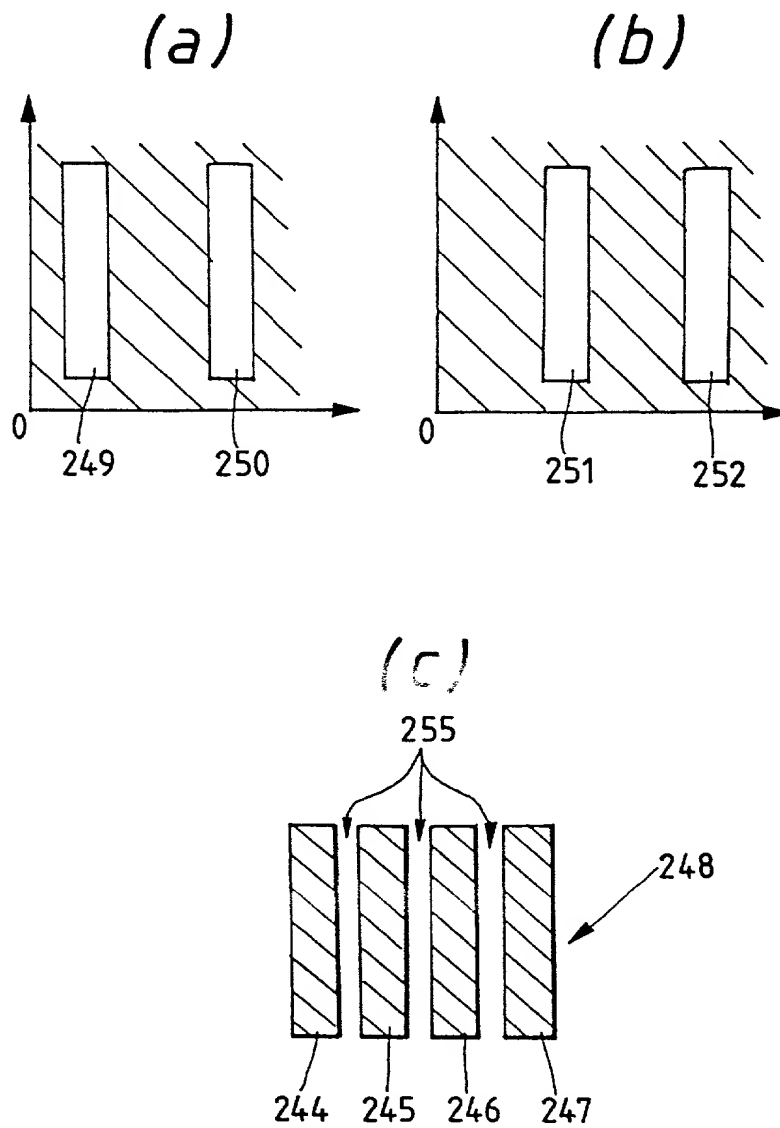
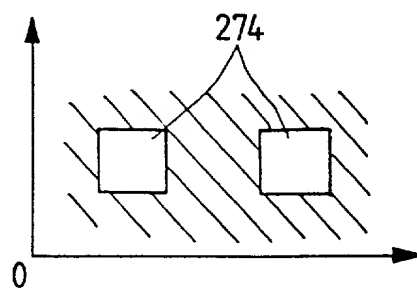
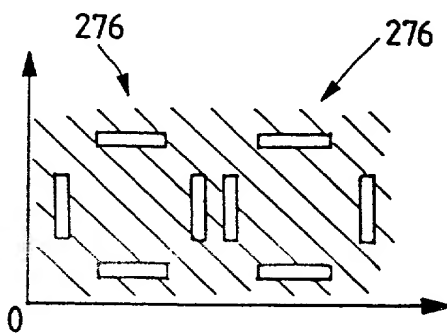


FIG. 2D

(a)



(b)



(c)

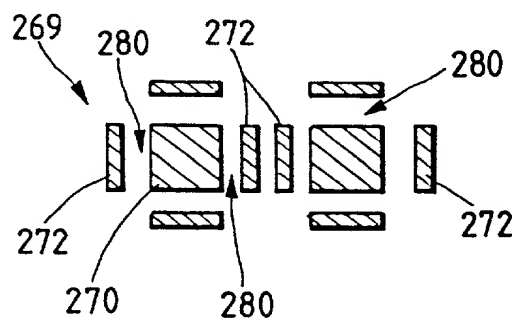


FIG. 2E

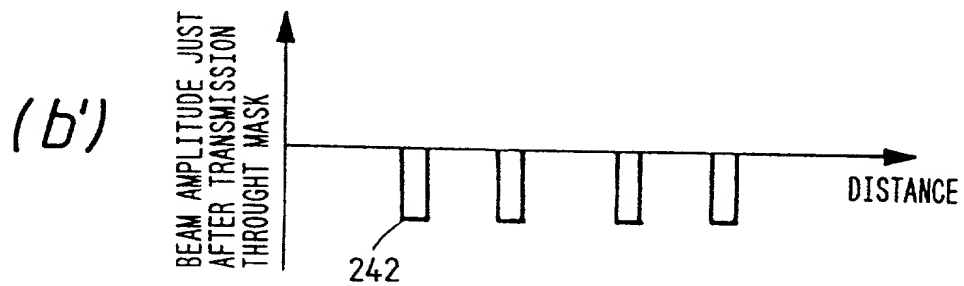
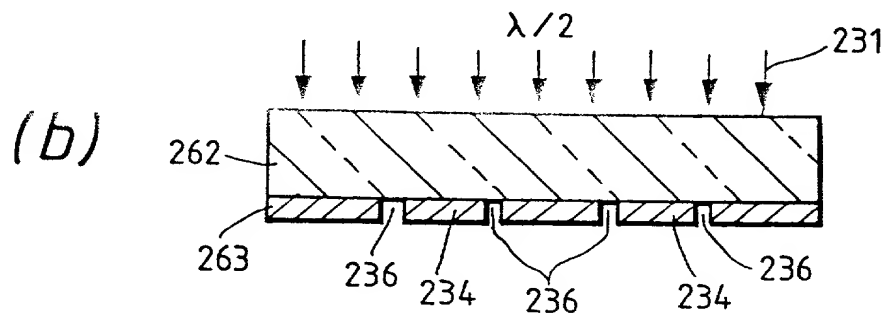
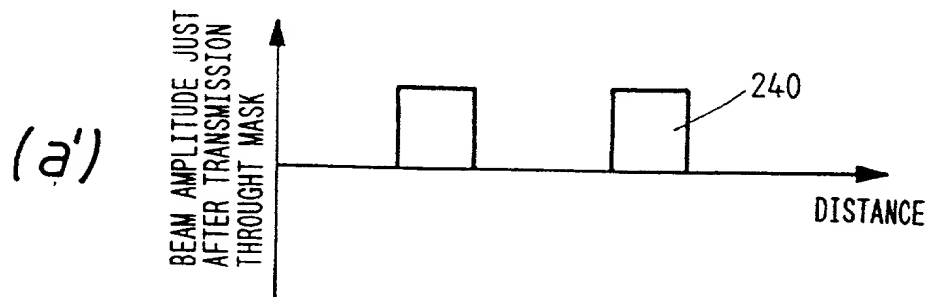
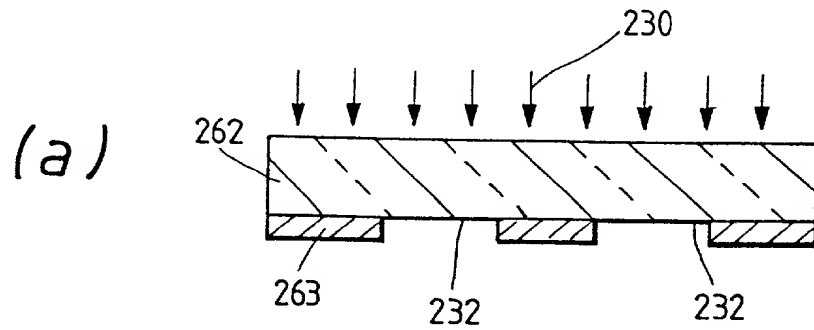
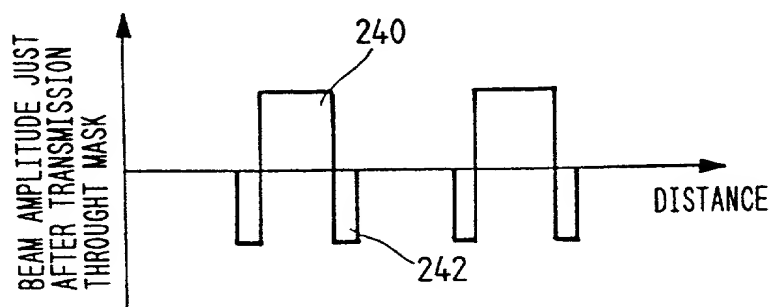
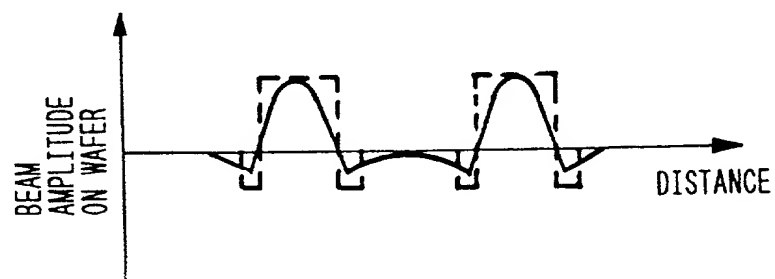


FIG. 2E

(c)



(d)



(e)

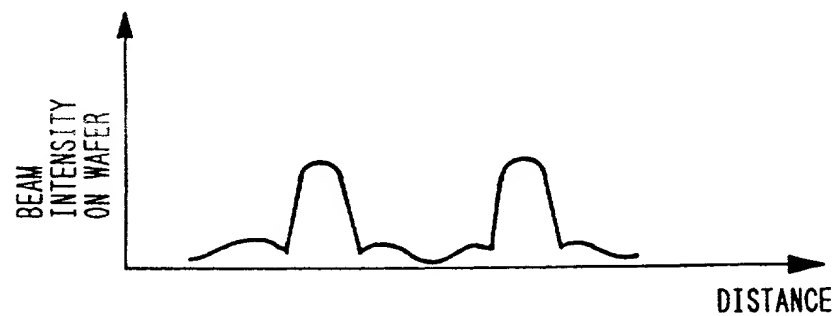


FIG. 2F

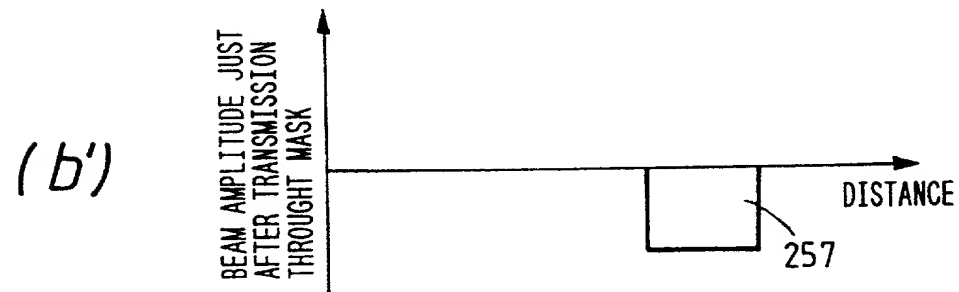
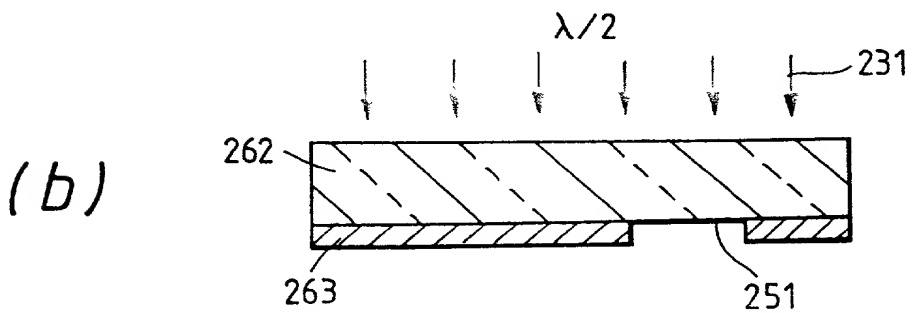
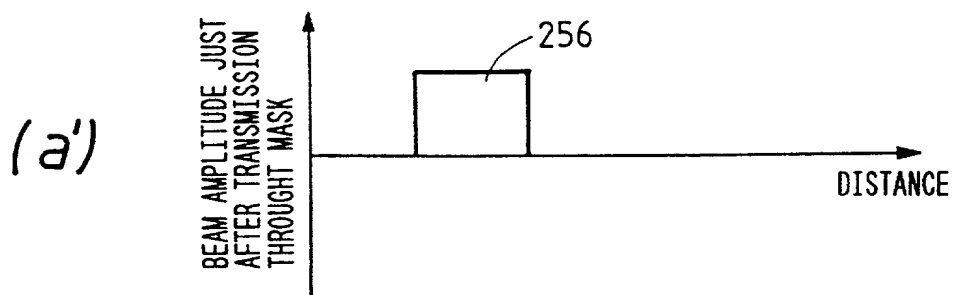
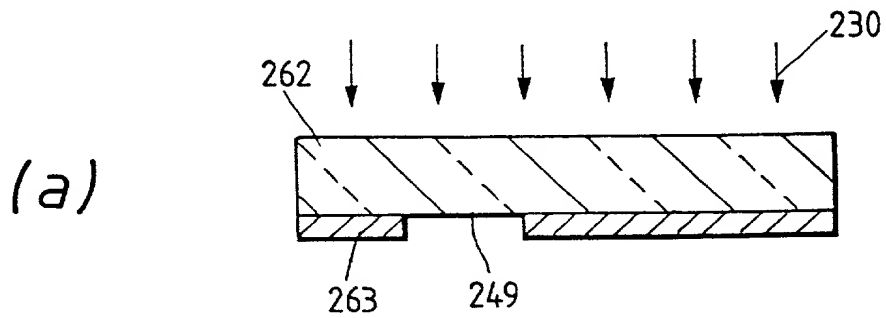


FIG. 2F

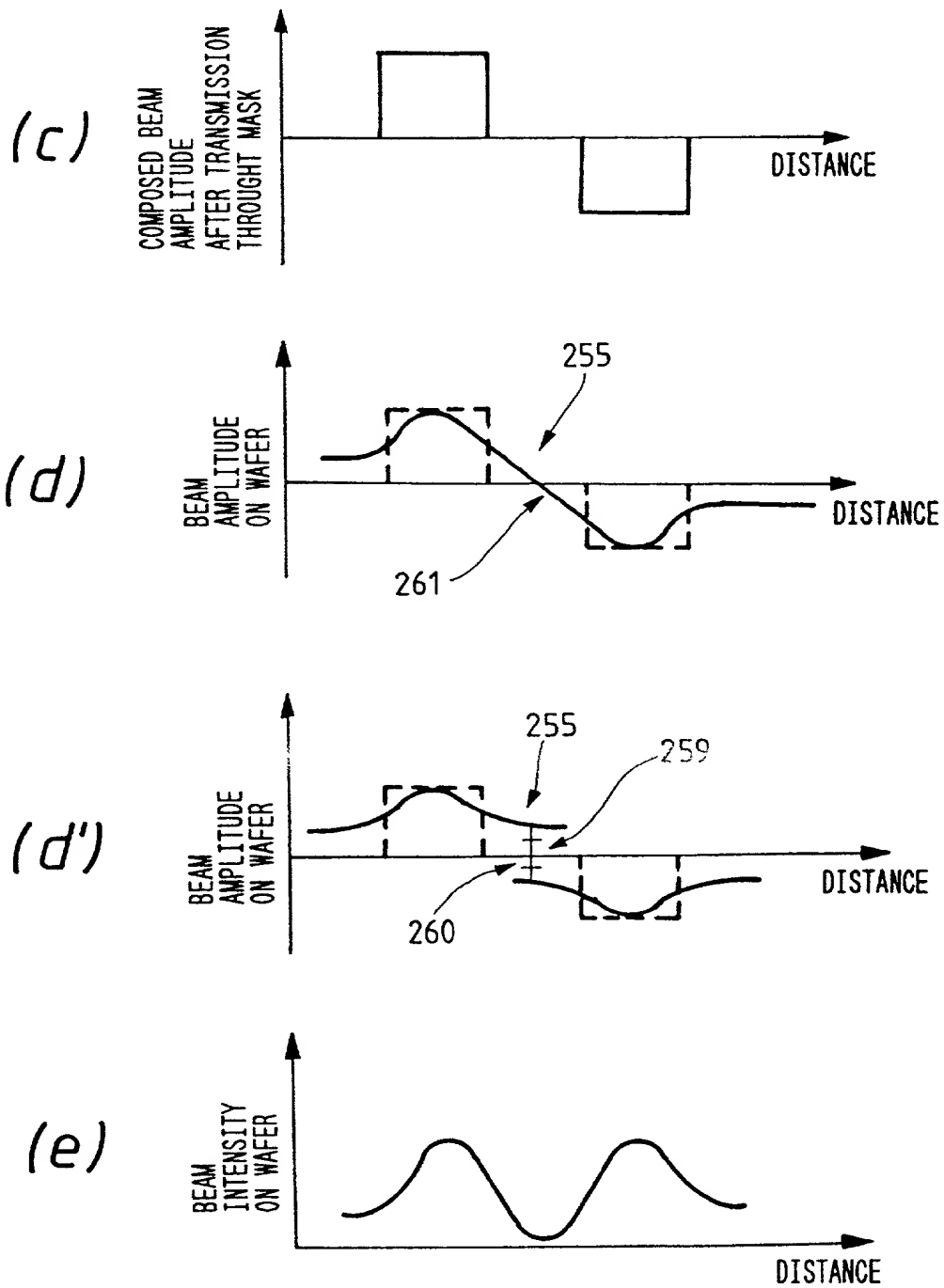


FIG. 2G

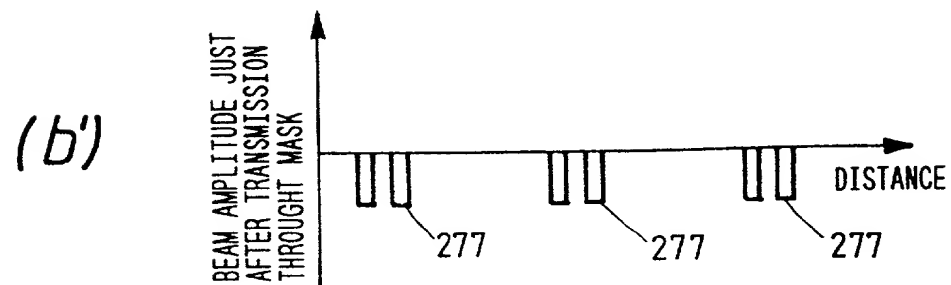
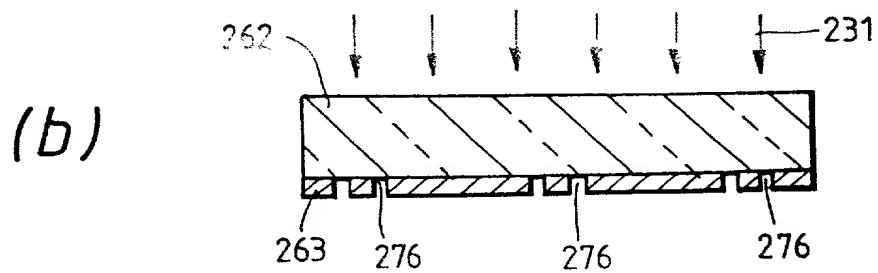
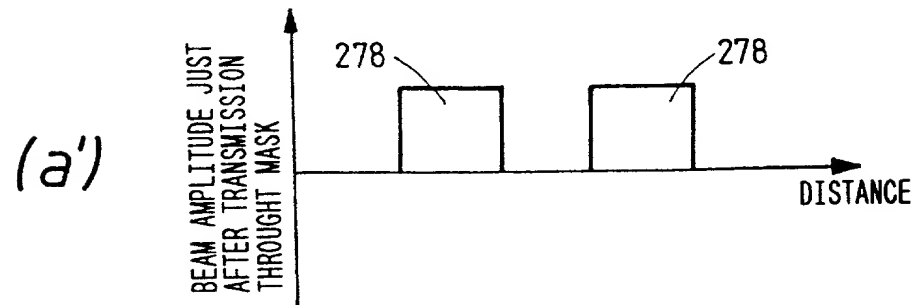
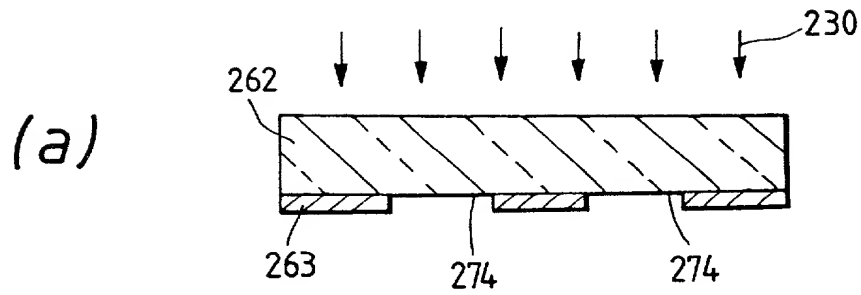


FIG. 2G

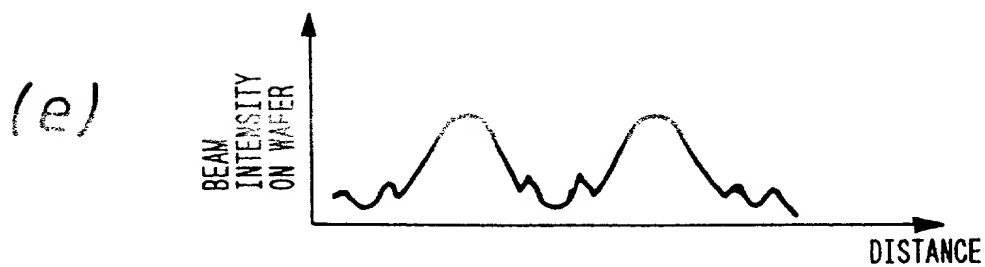
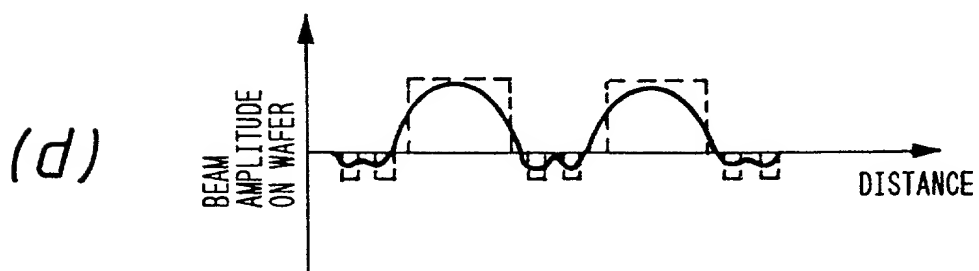
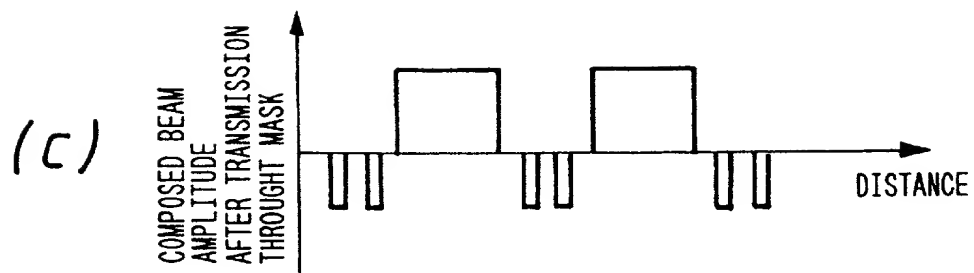


FIG. 2H

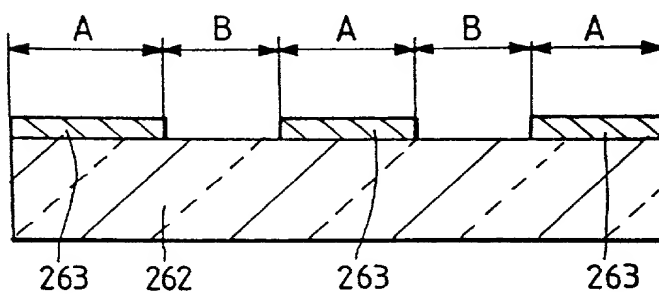
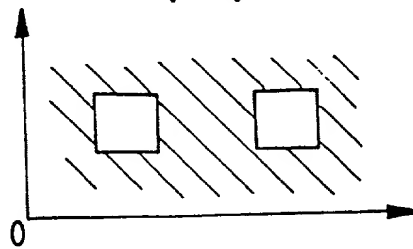
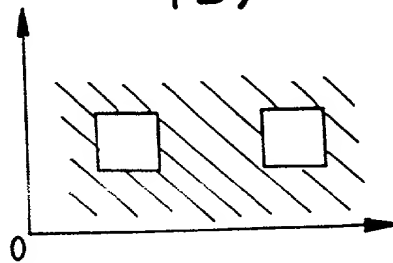


FIG. 2I

(a)



(b)



(c)

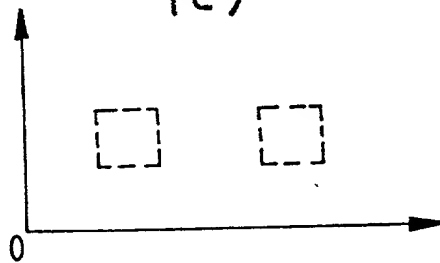


FIG. 3A

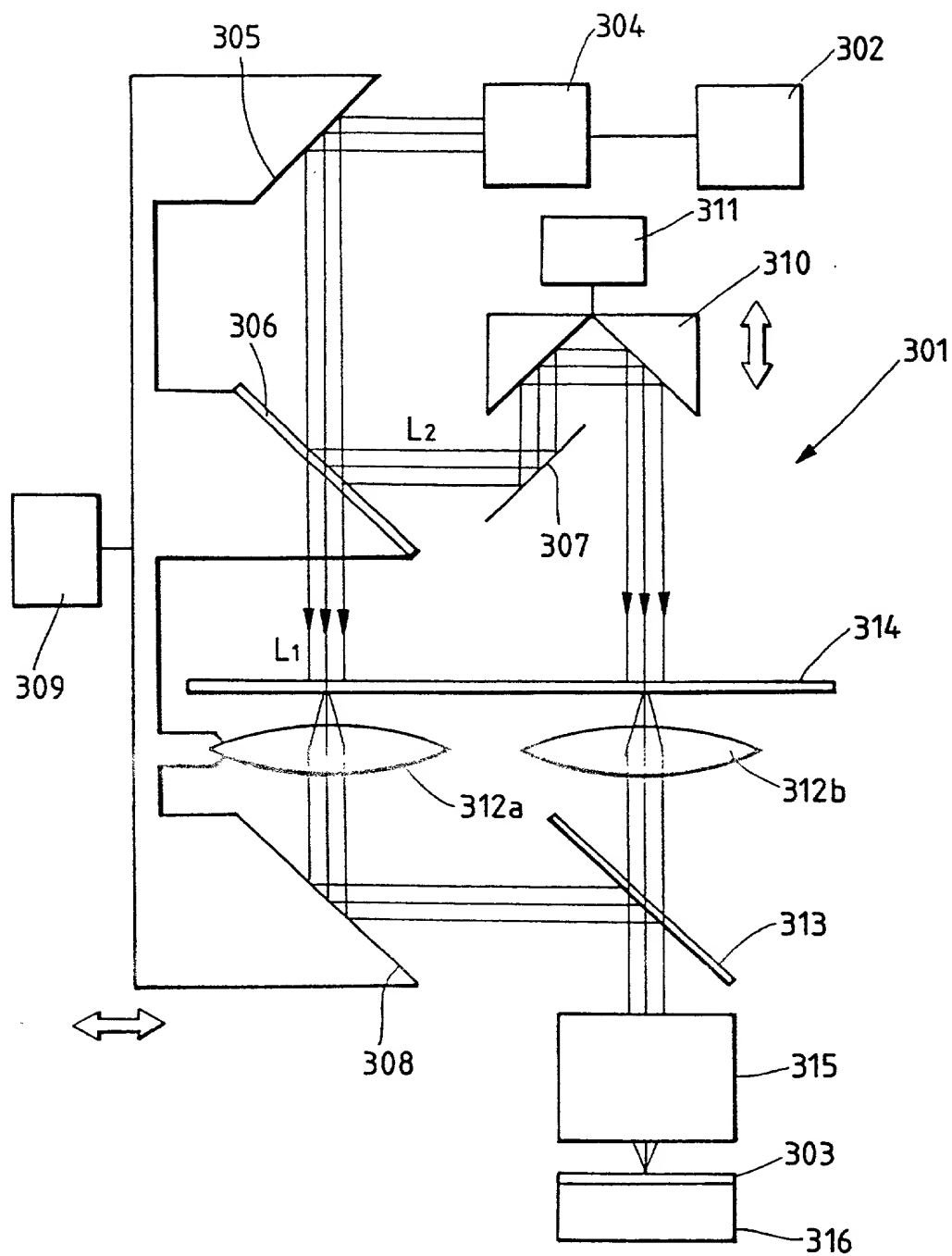


FIG. 3B

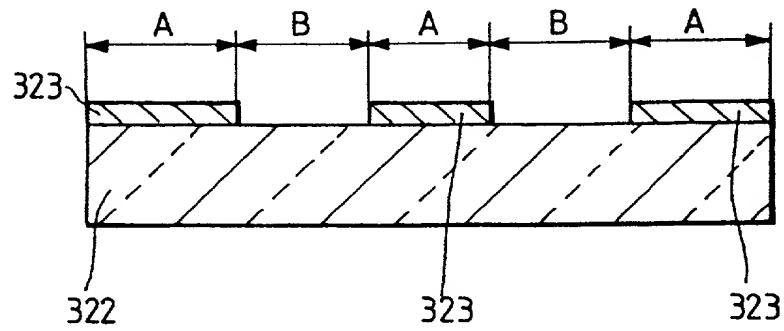


FIG. 3D

DEPENDENCY ON FOCAL POSITION

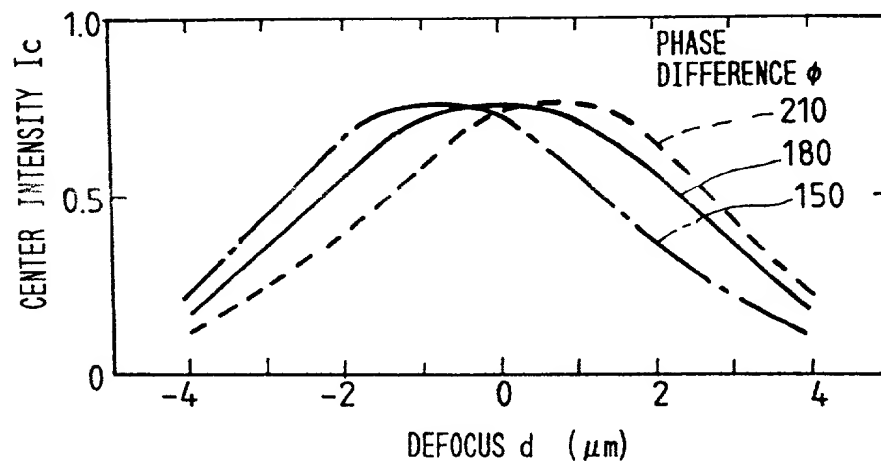


FIG. 3C

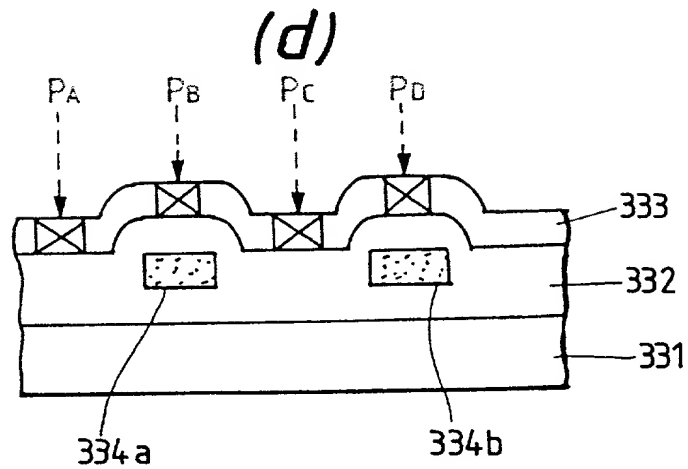
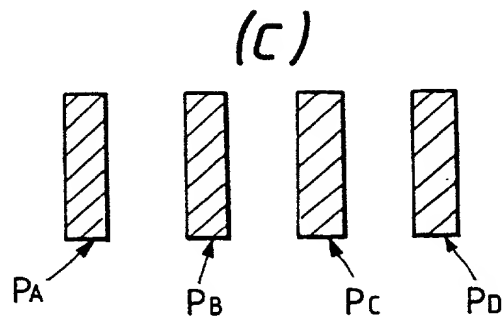
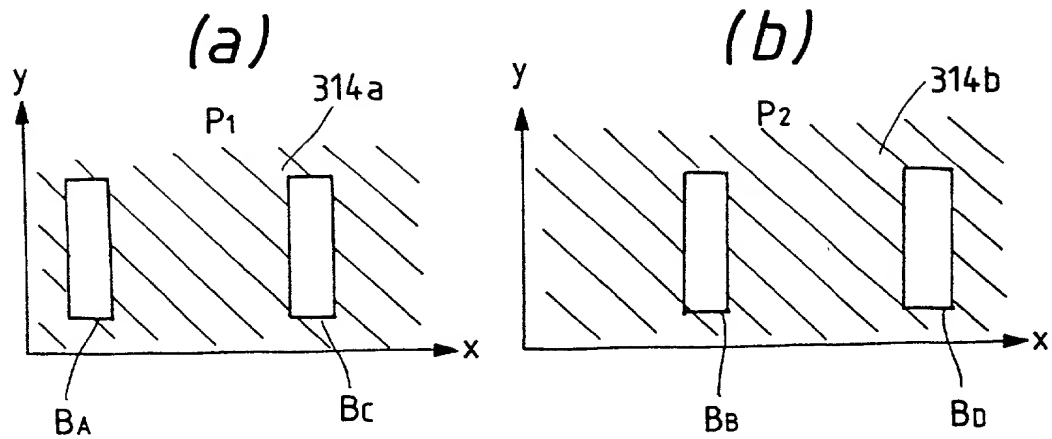
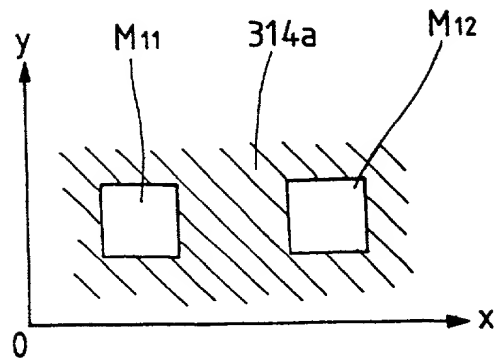
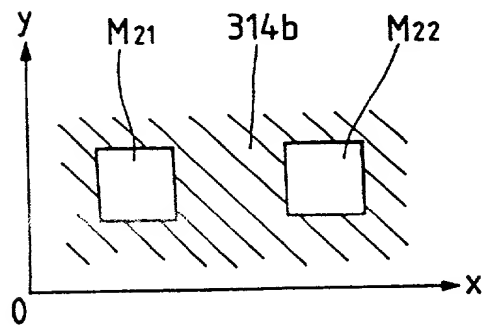


FIG. 3E

(a)



(b)



(c)

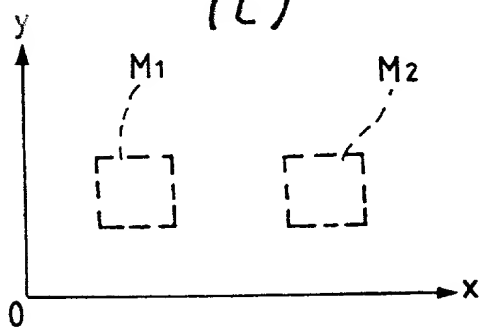


FIG. 5A

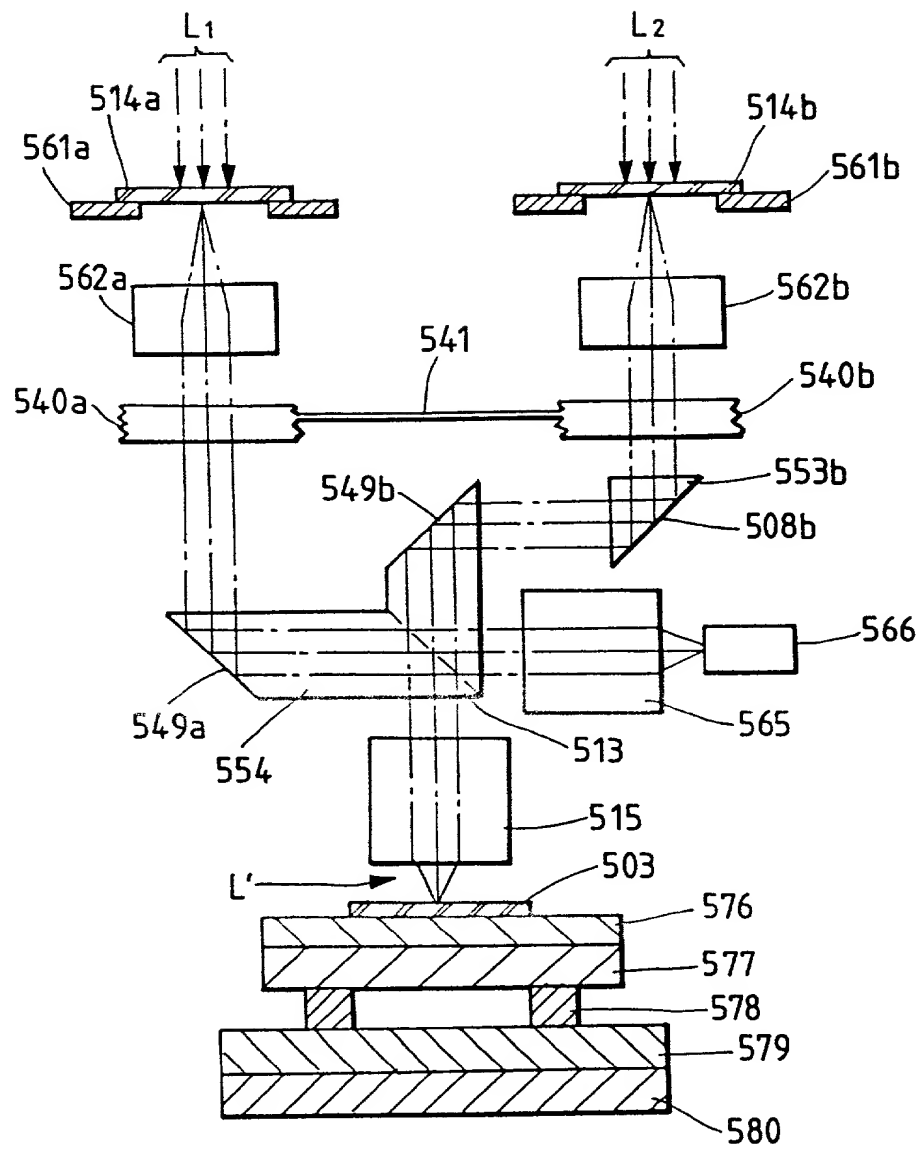


FIG. 5B

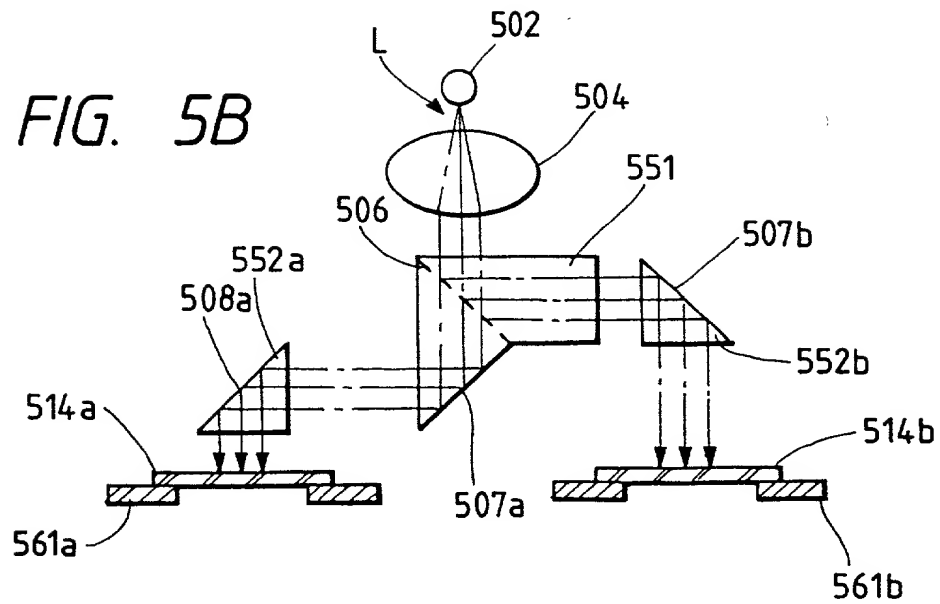


FIG. 5C

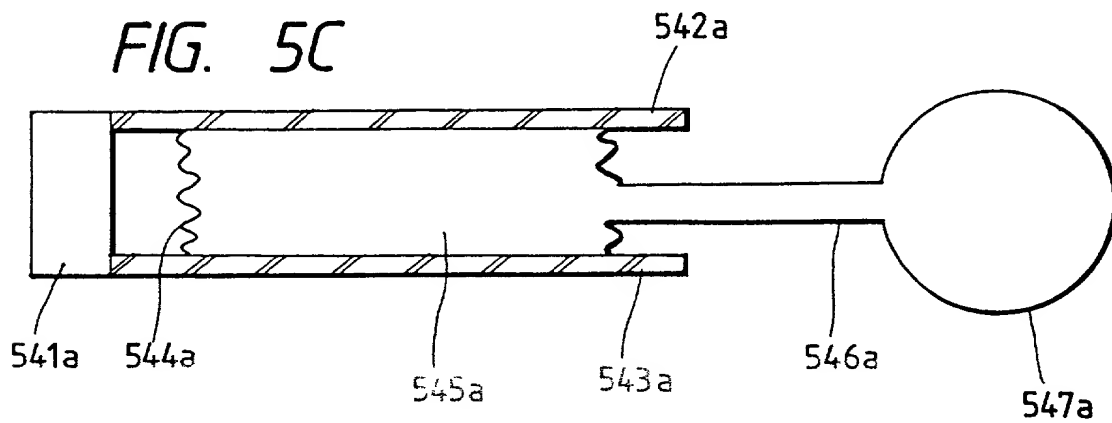


FIG. 5D

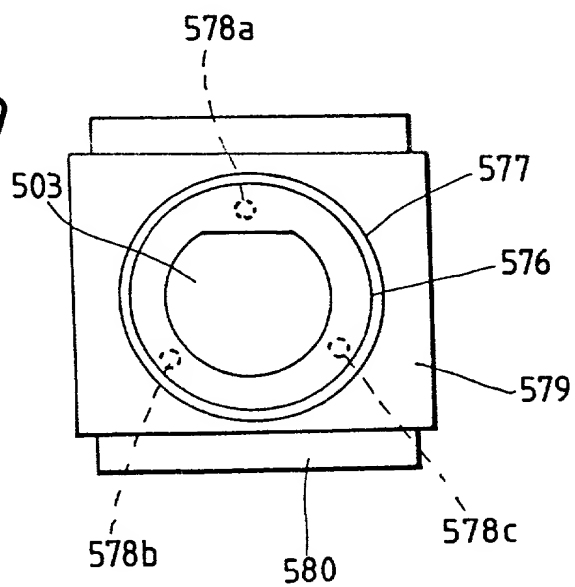


FIG. 6A

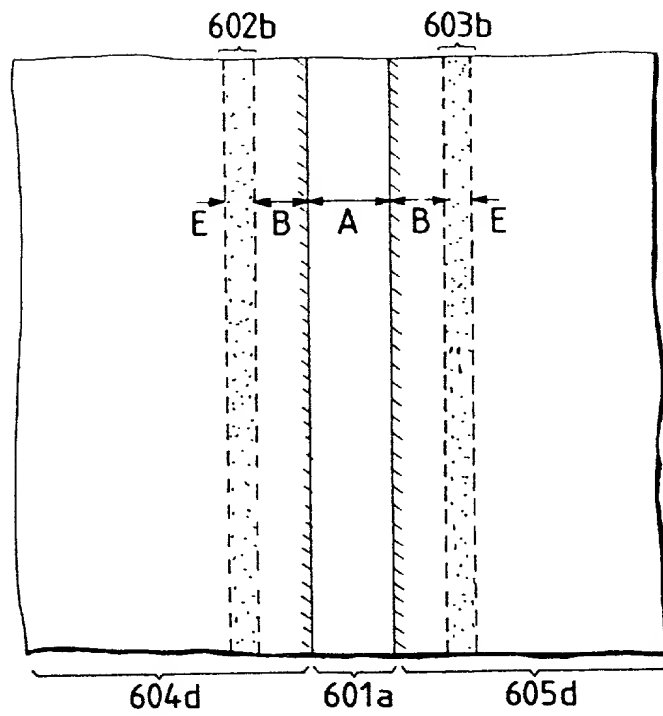


FIG. 6B

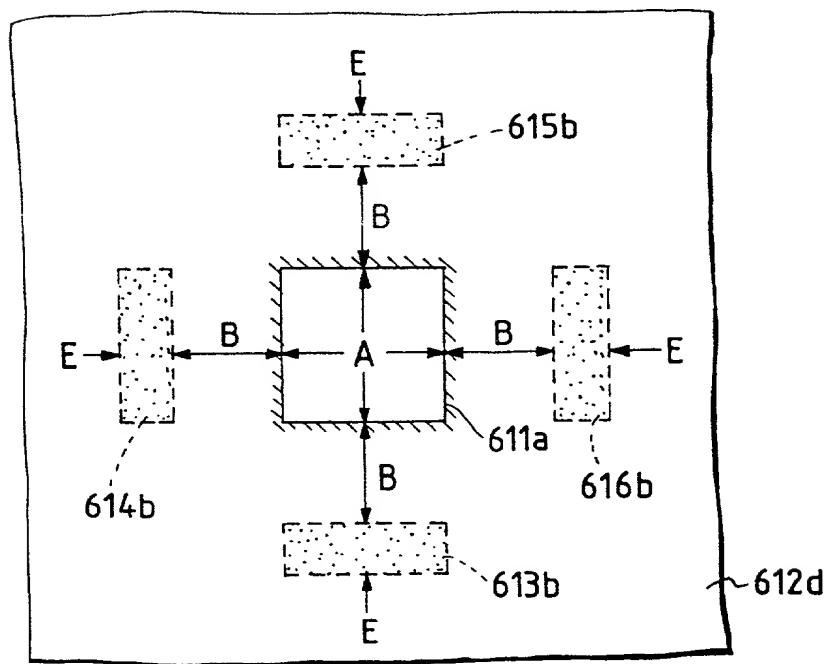


FIG. 6C

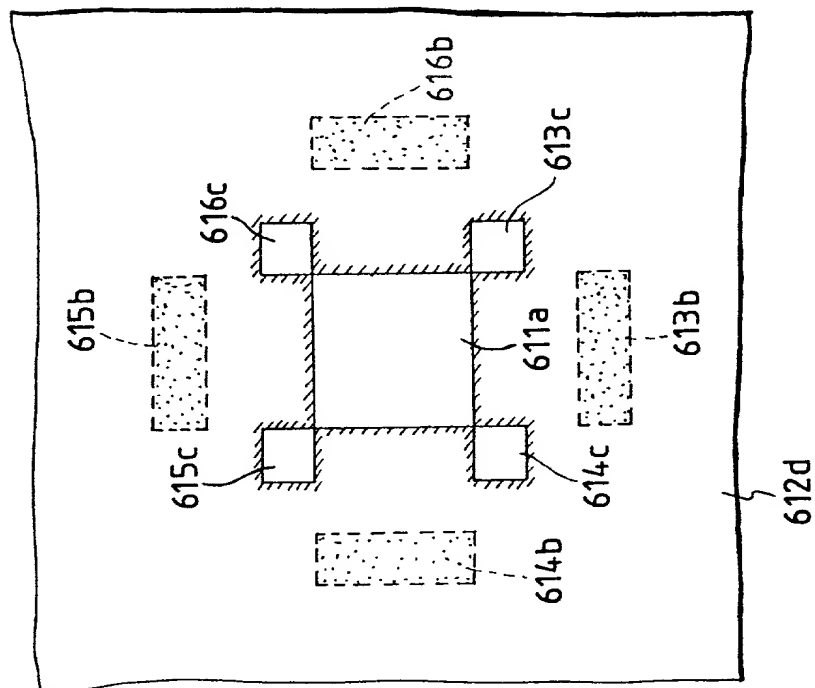


FIG. 6D

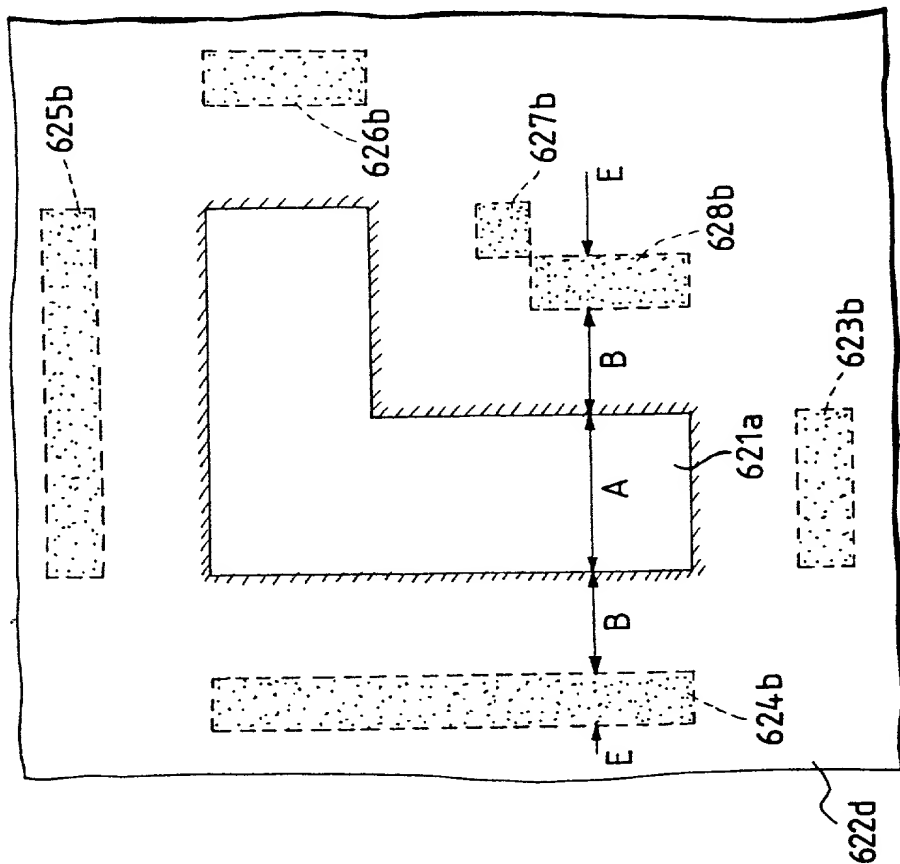


FIG. 6E

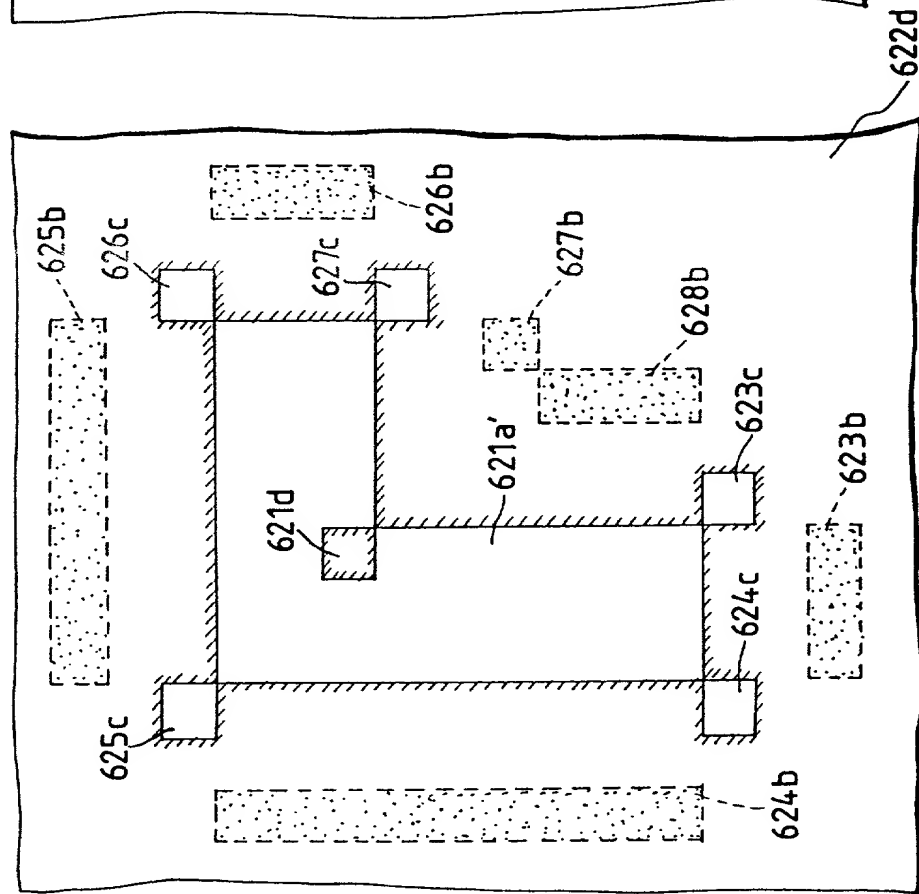


FIG. 6F

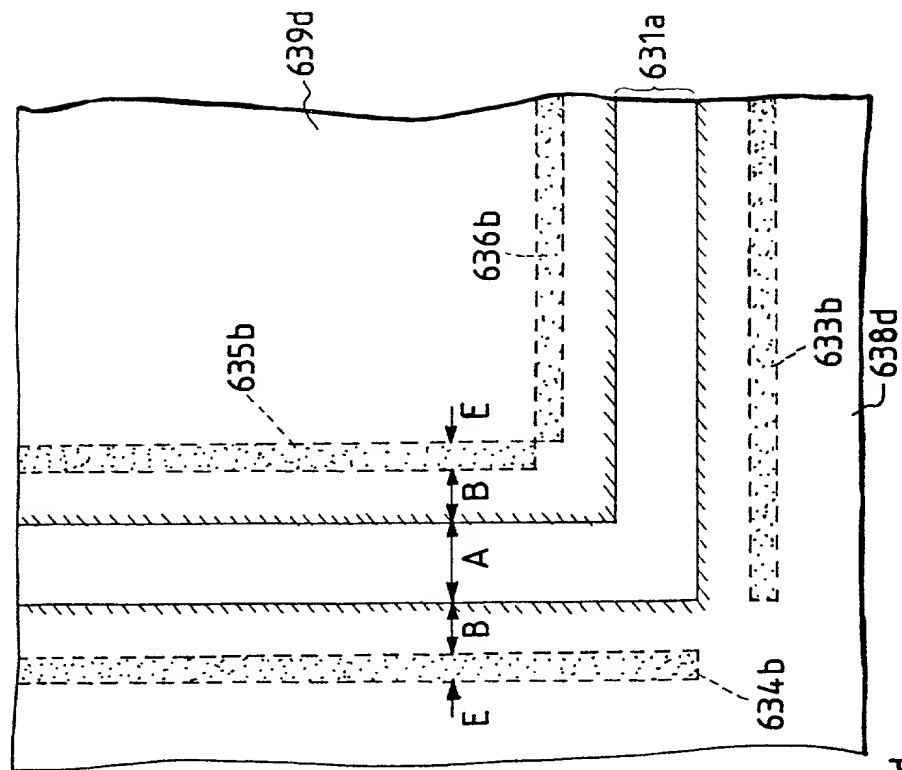


FIG. 6G

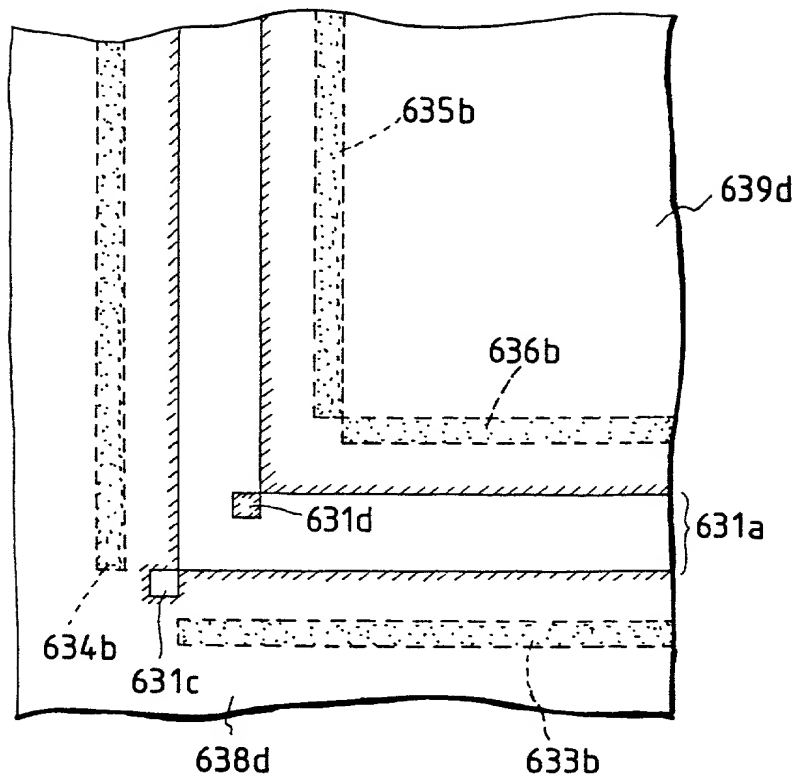
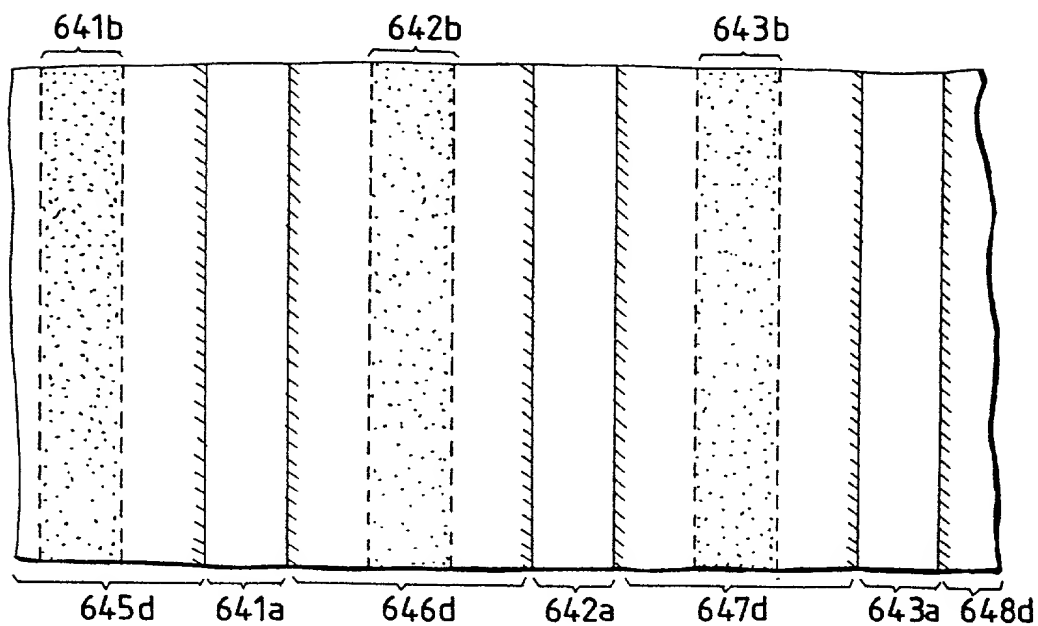


FIG. 6H



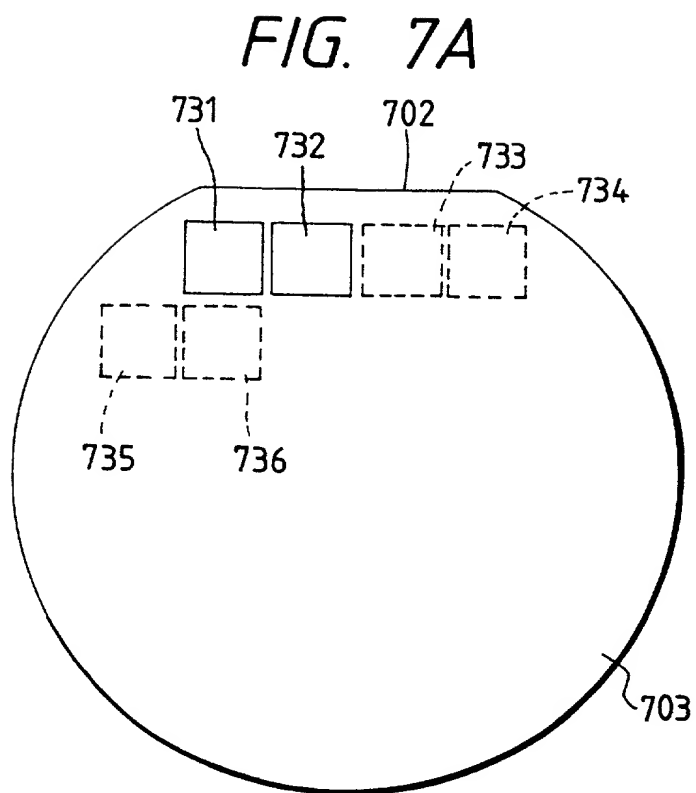


FIG. 7B

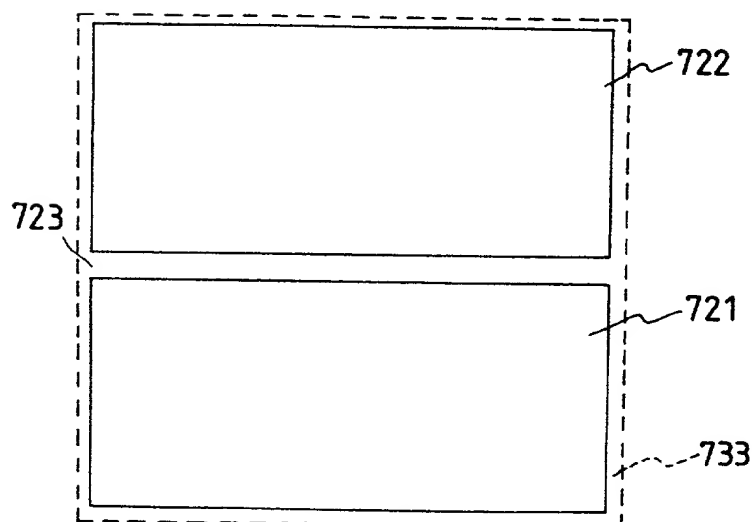


FIG. 7C

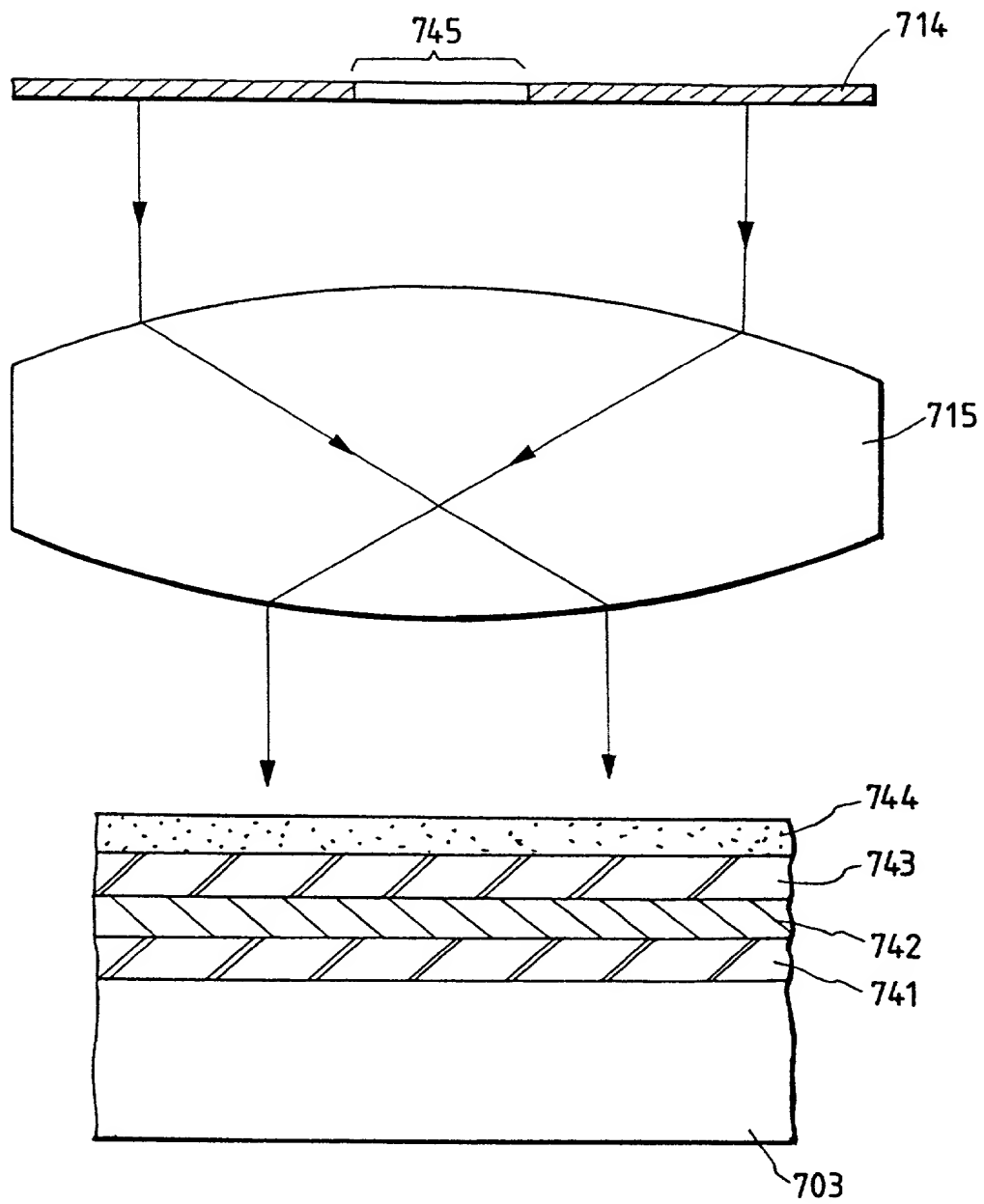


FIG. 7D

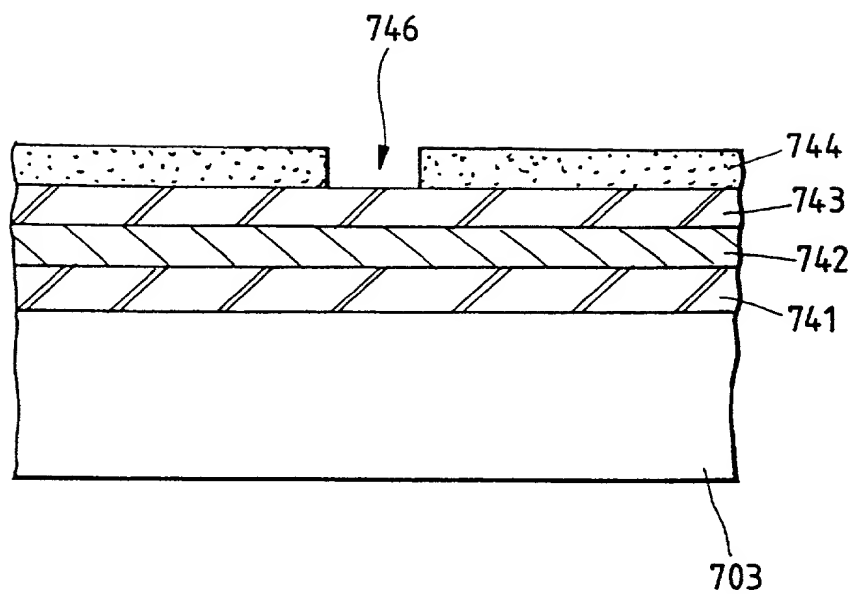


FIG. 7E

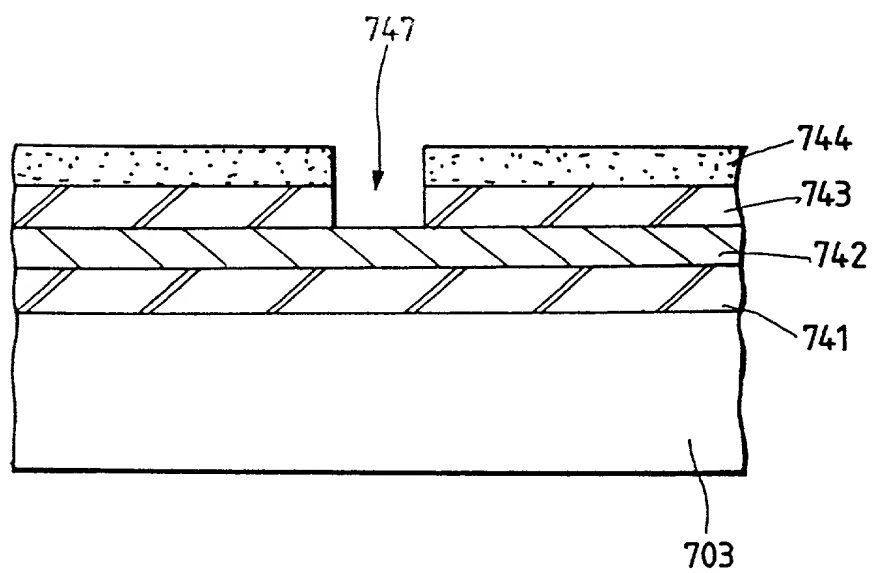


FIG. 7F

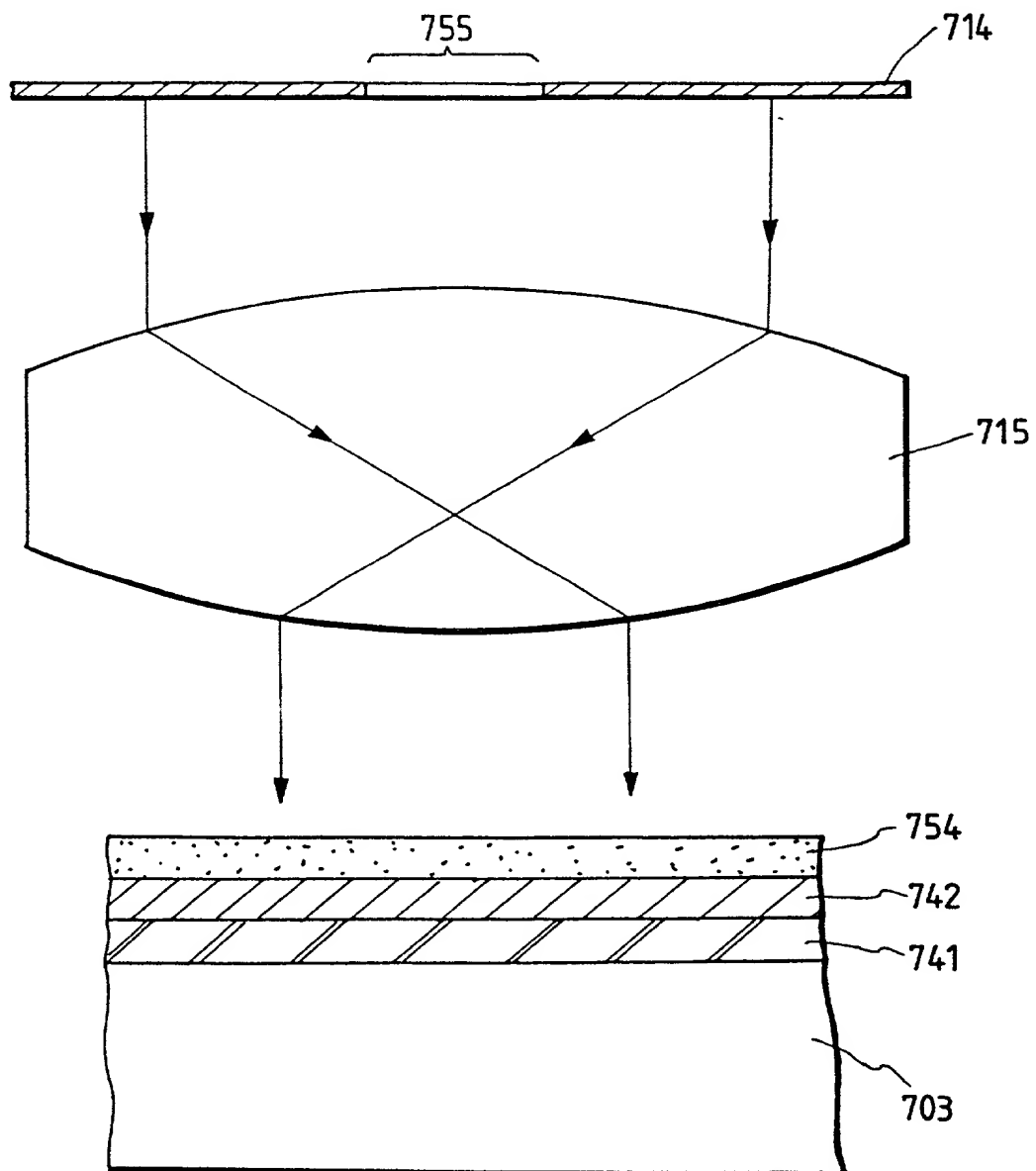


FIG. 7G

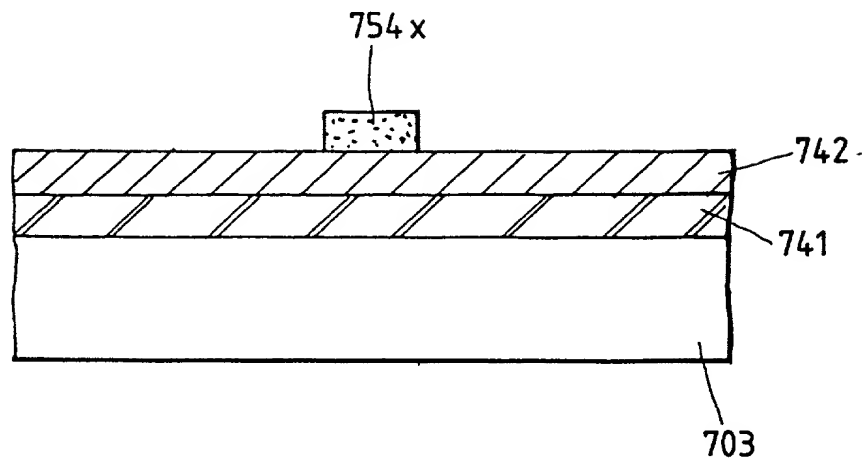


FIG. 7H

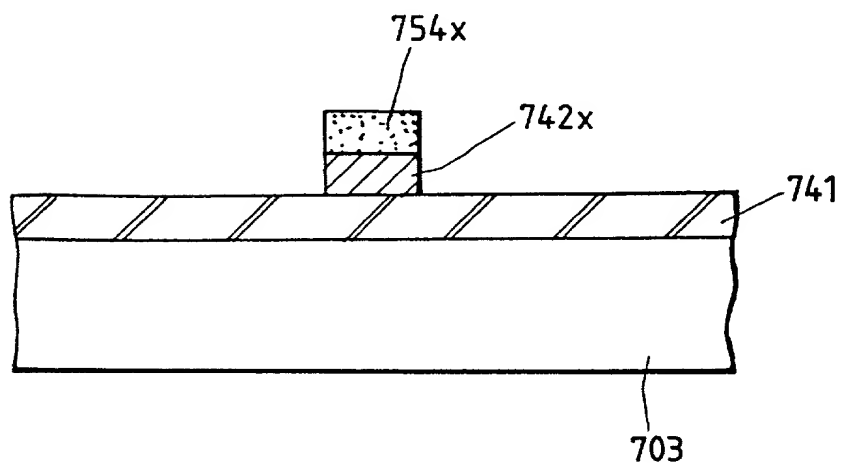


FIG. 7I

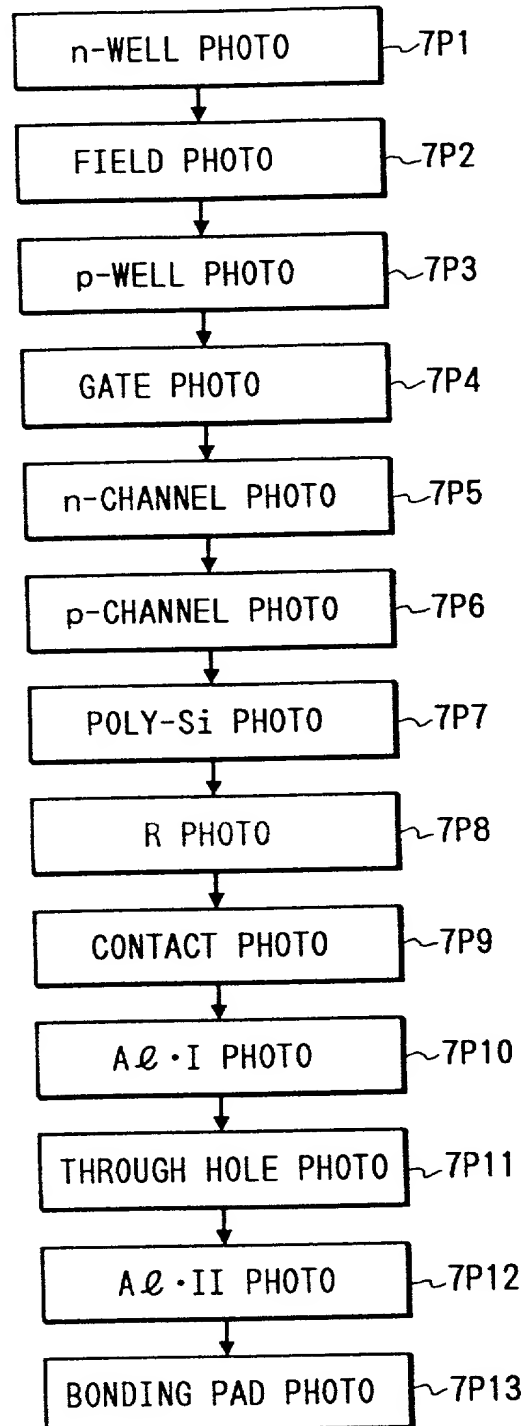


FIG. 7J

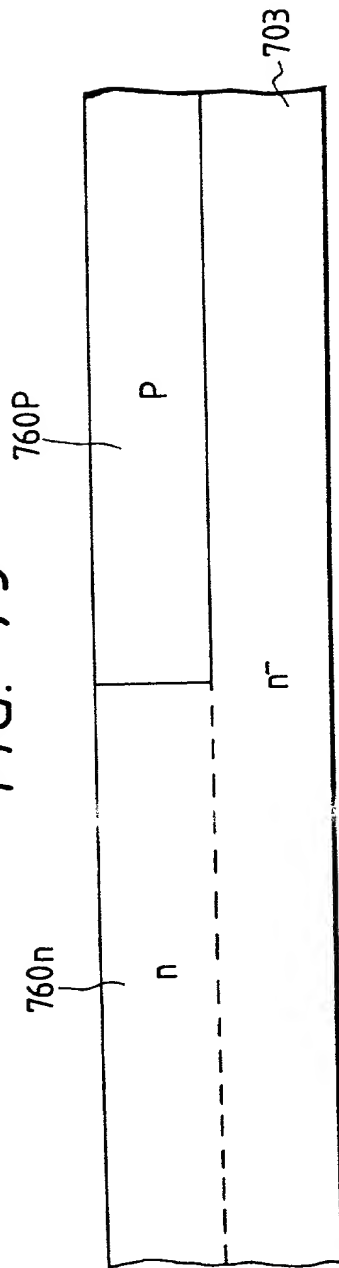


FIG. 7K

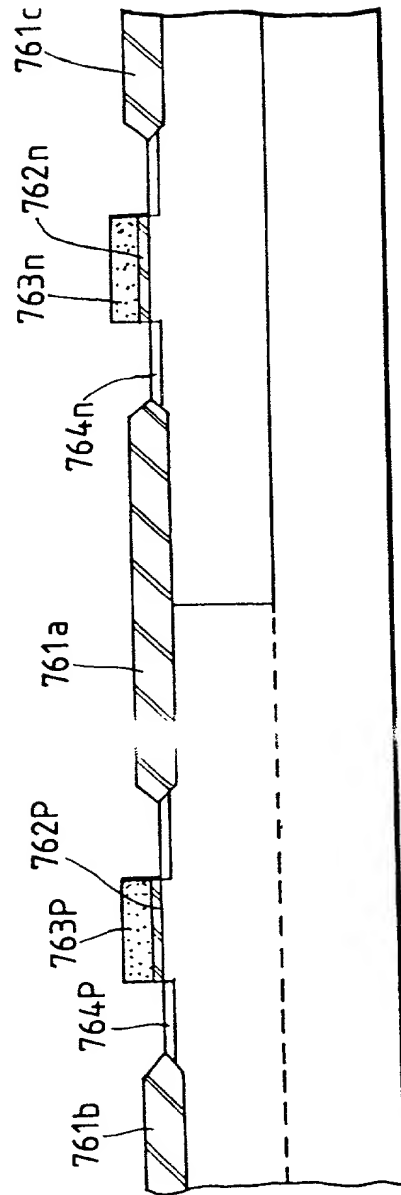


FIG. 7L

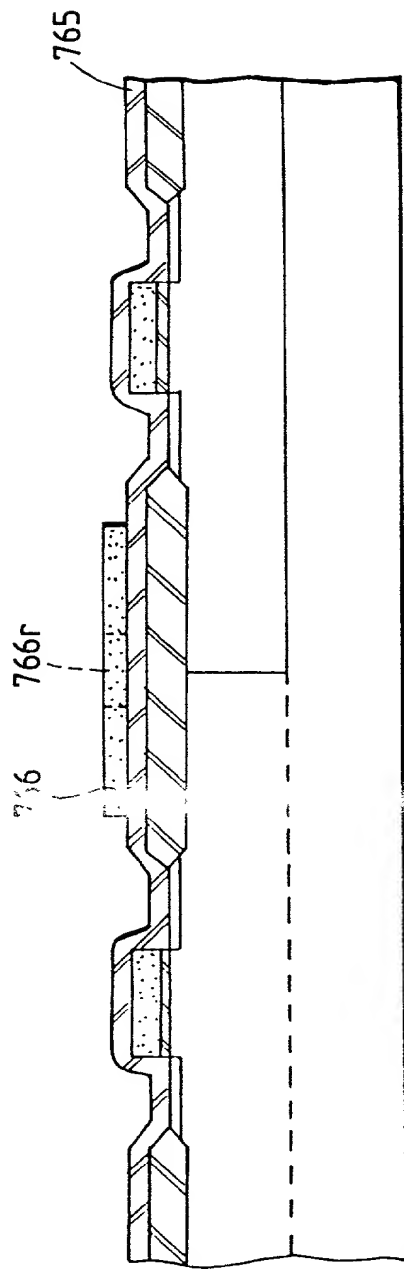


FIG. 7M

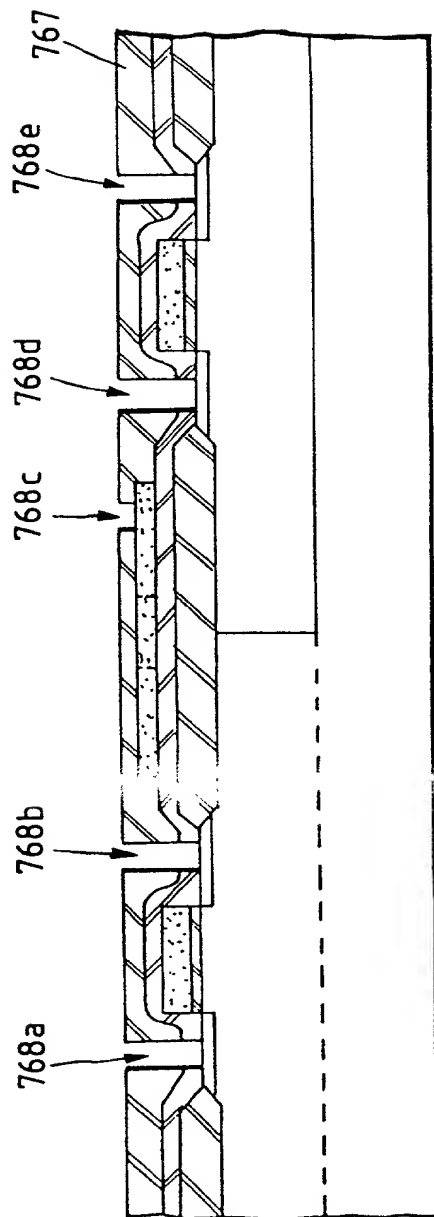


FIG. 7N

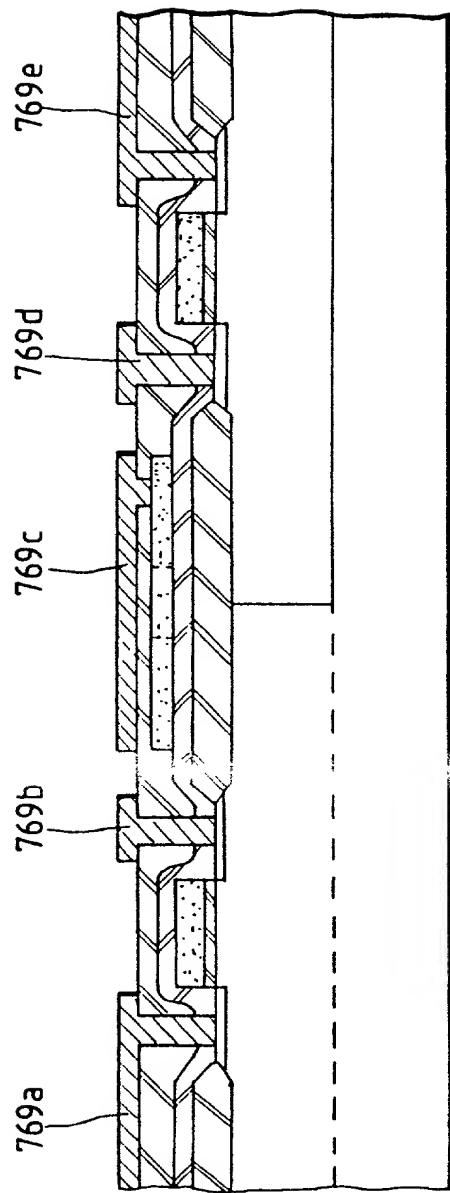
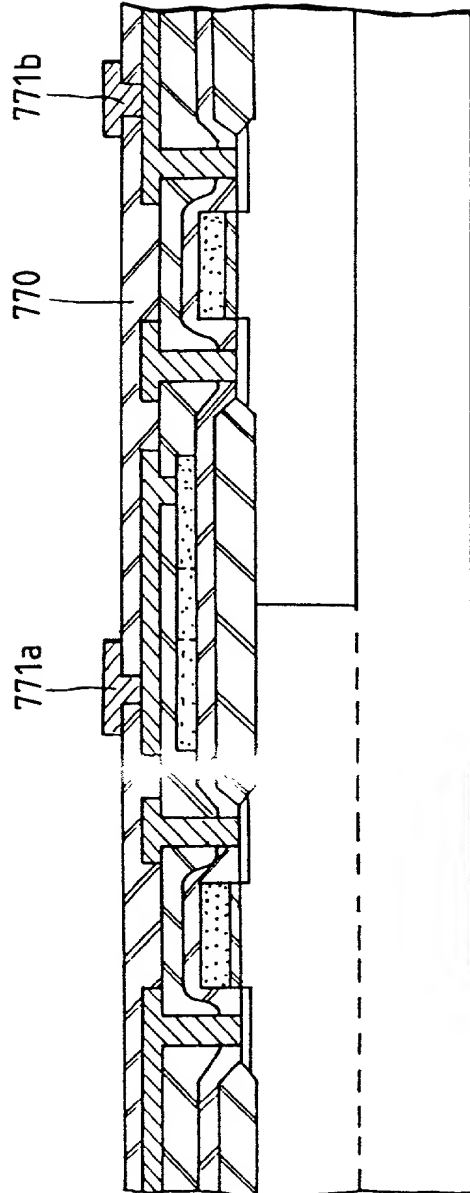


FIG. 7O



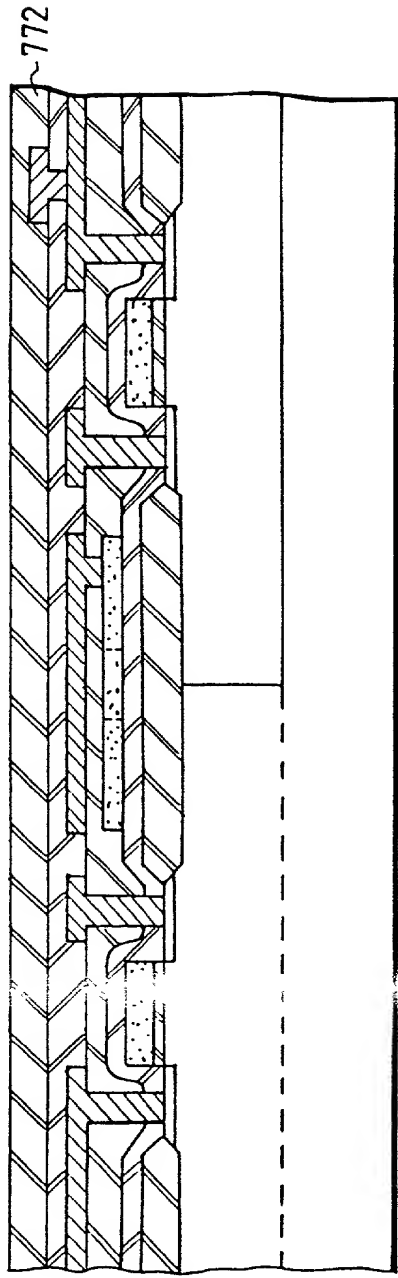


FIG. 7P

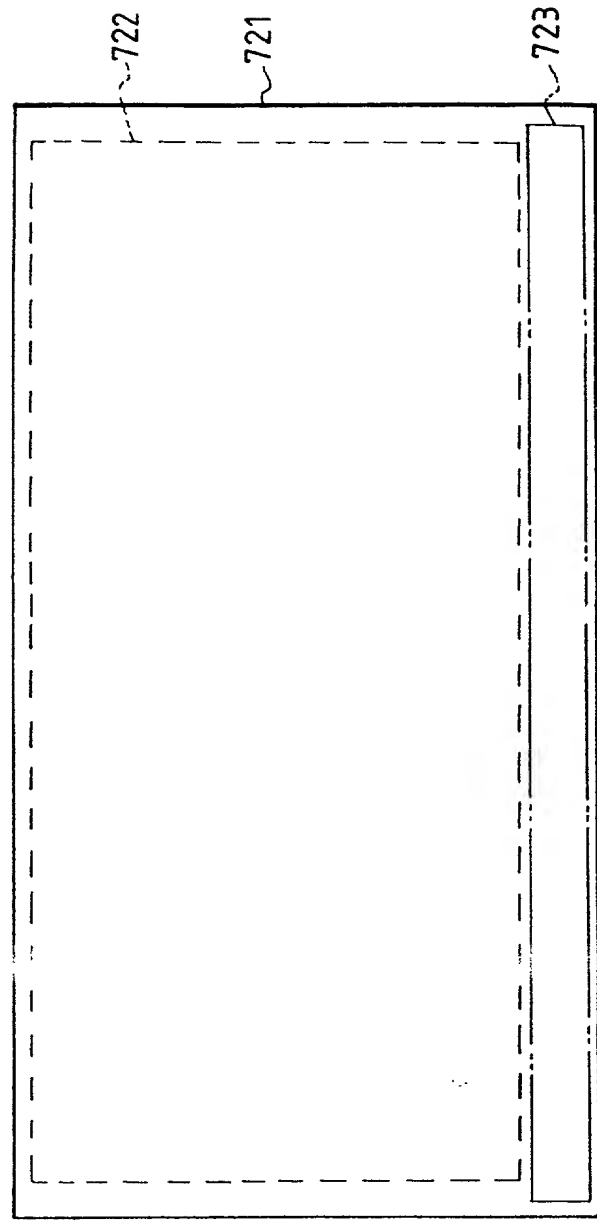


FIG. 7Q

FIG. 8A

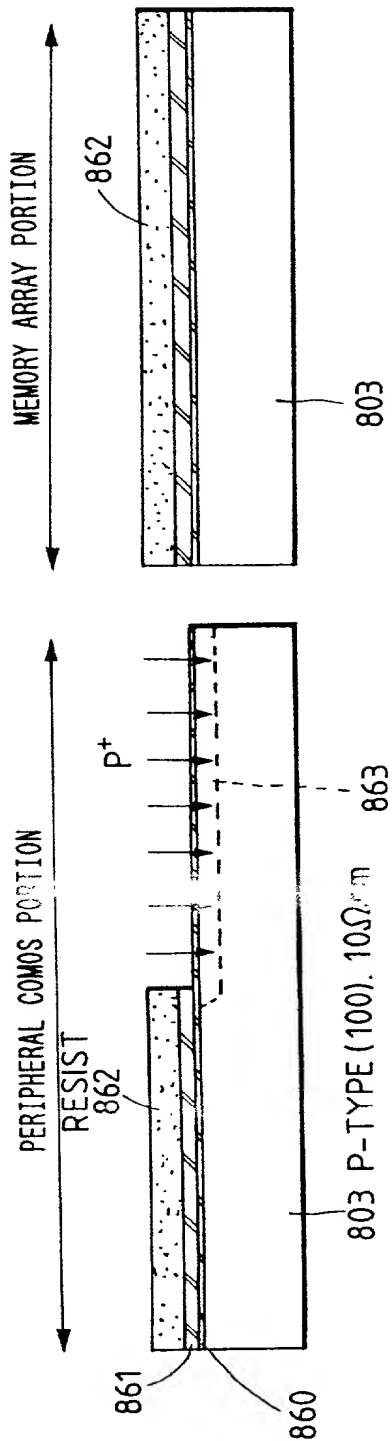


FIG. 8B

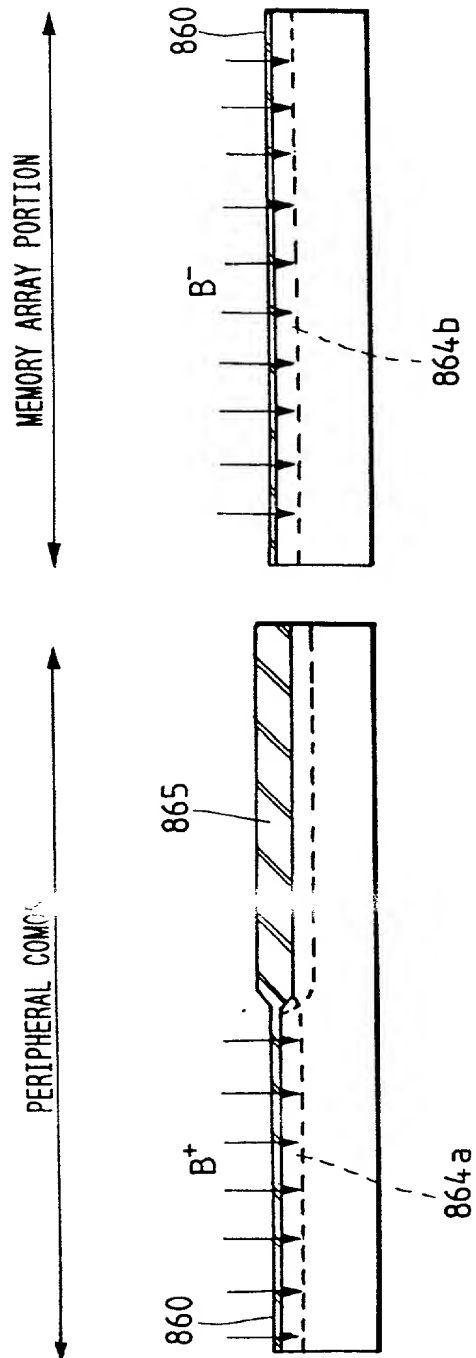


FIG. 8C

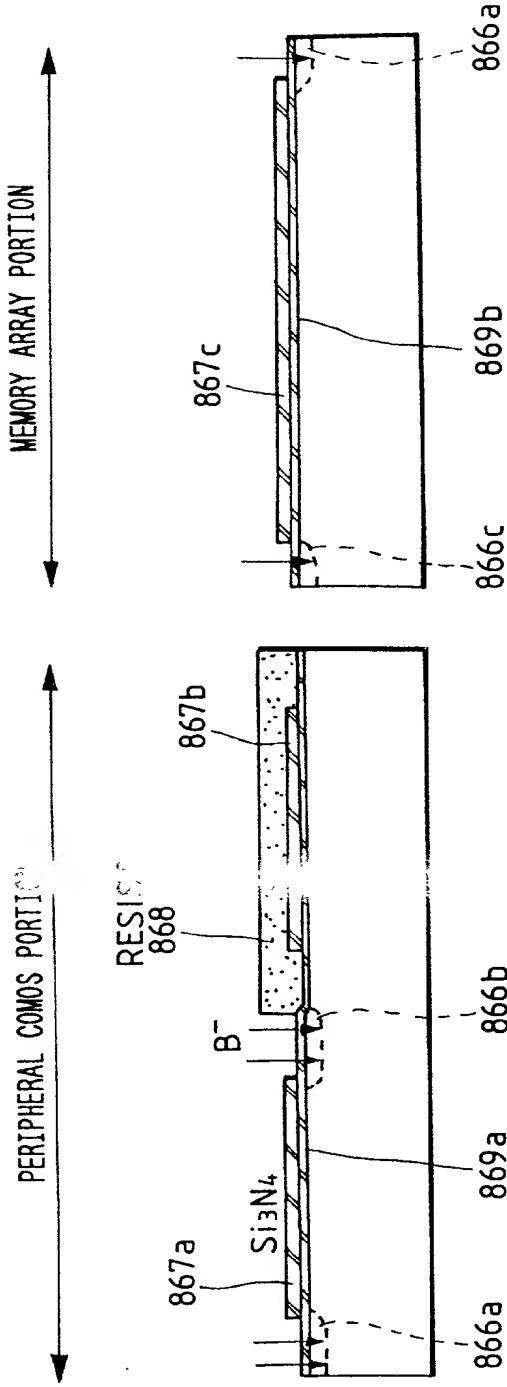


FIG. 8D

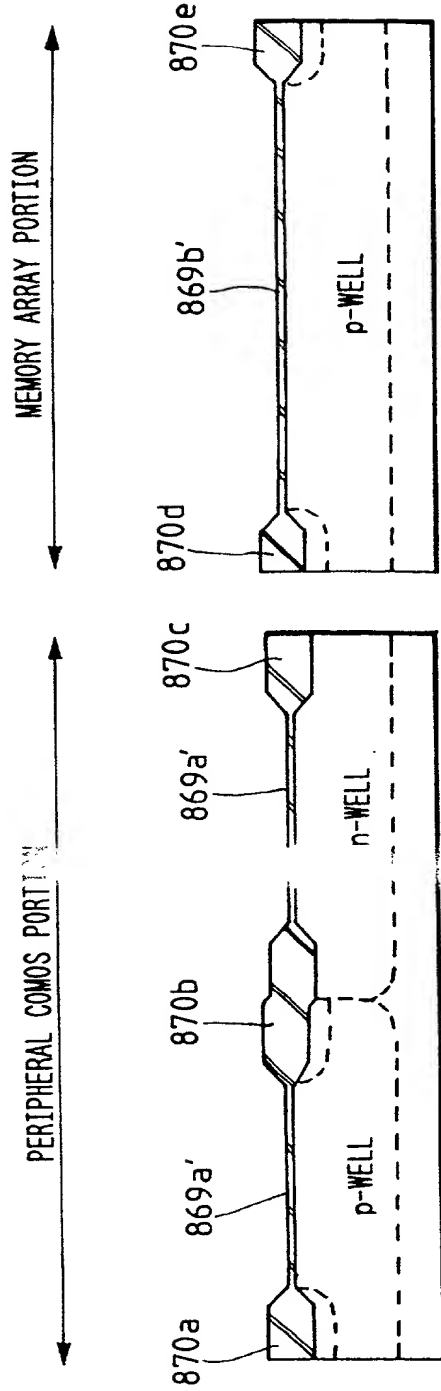


FIG. 8E

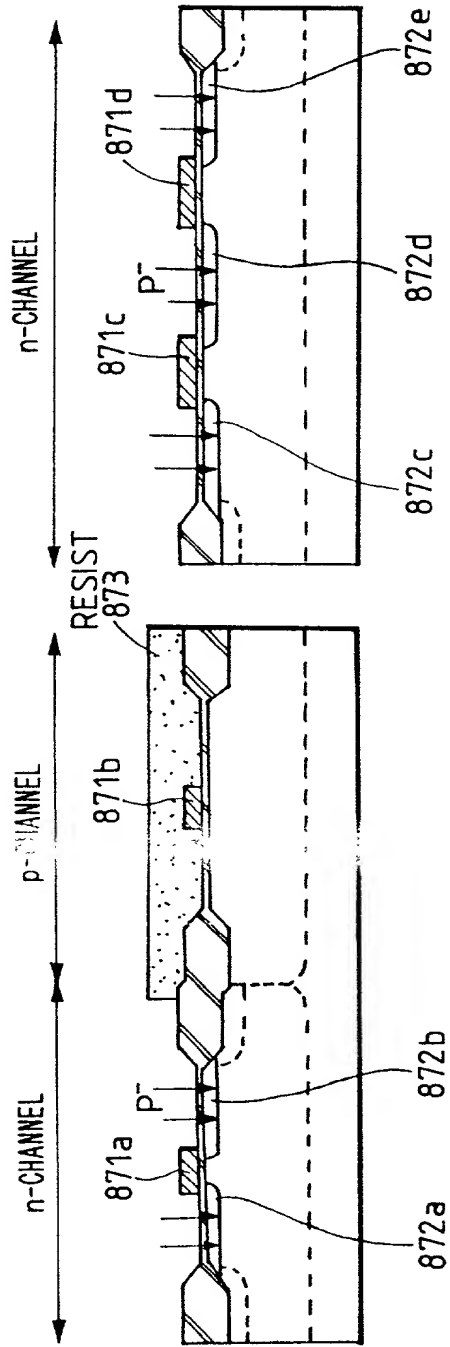


FIG. 8F

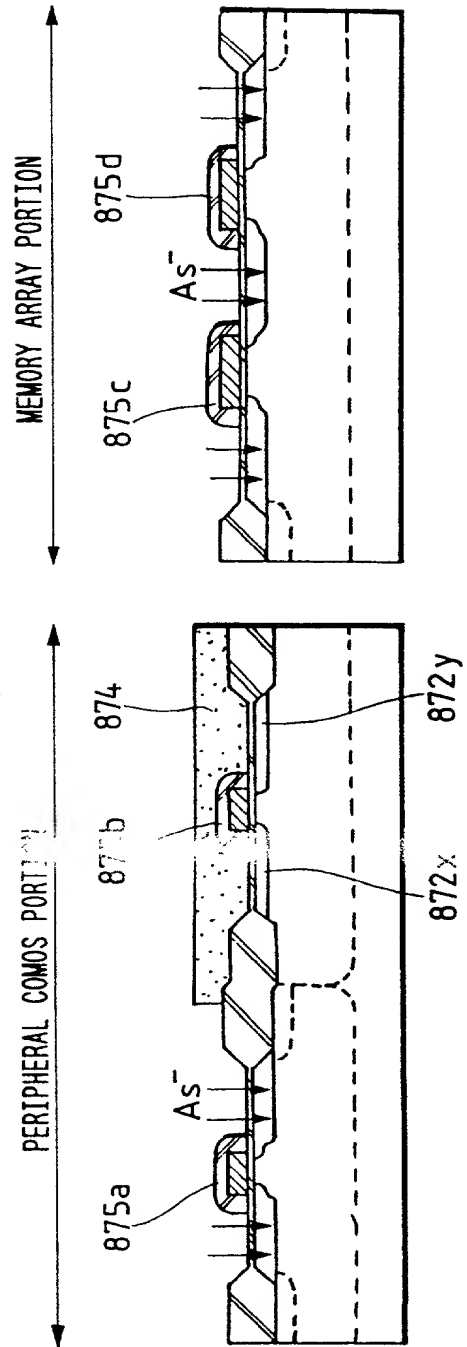


FIG. 8G

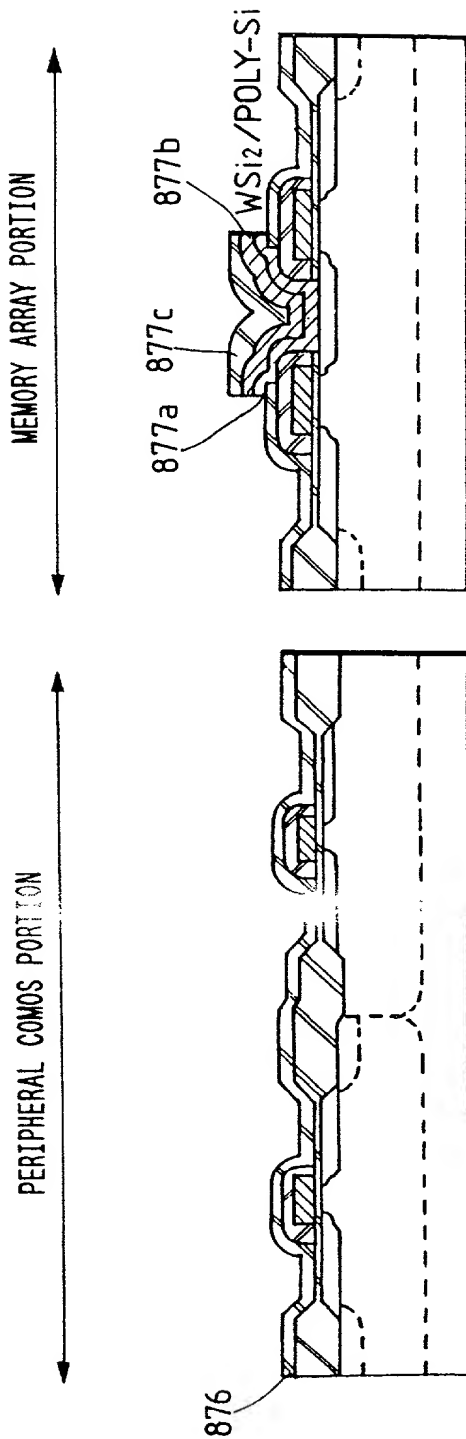


FIG. 8H

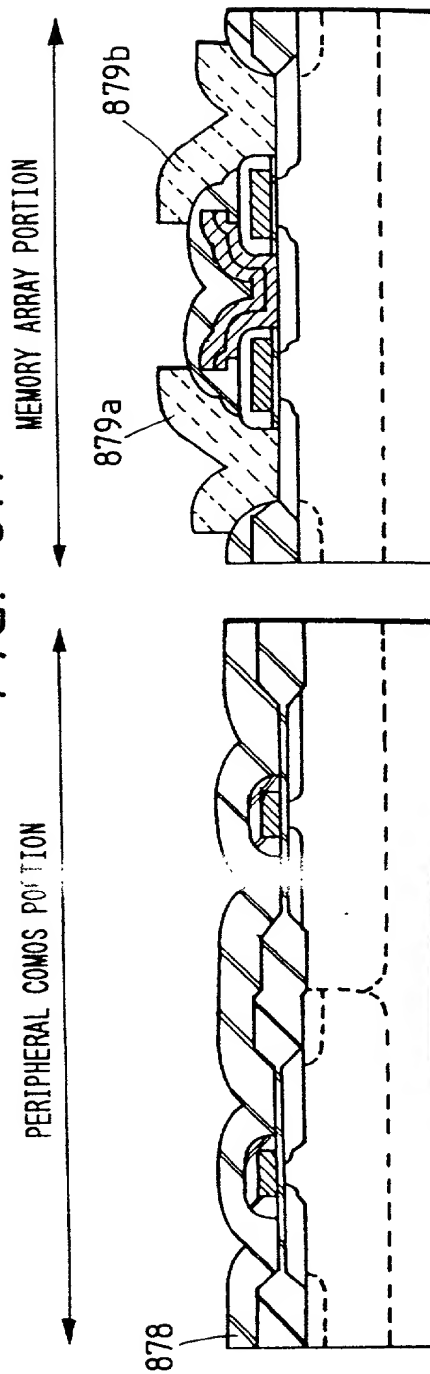


FIG. 8I

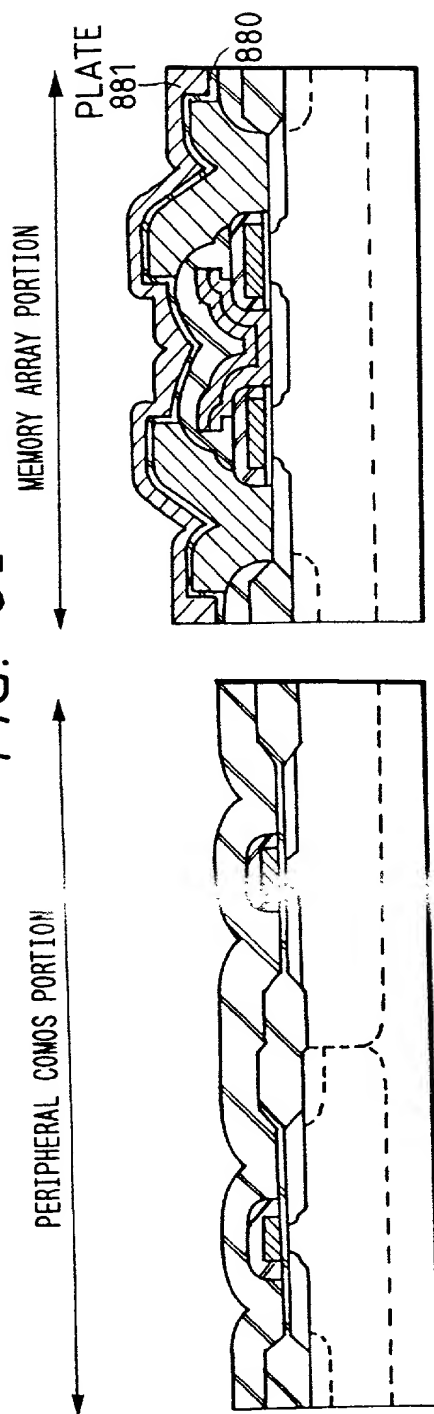


FIG. 8J

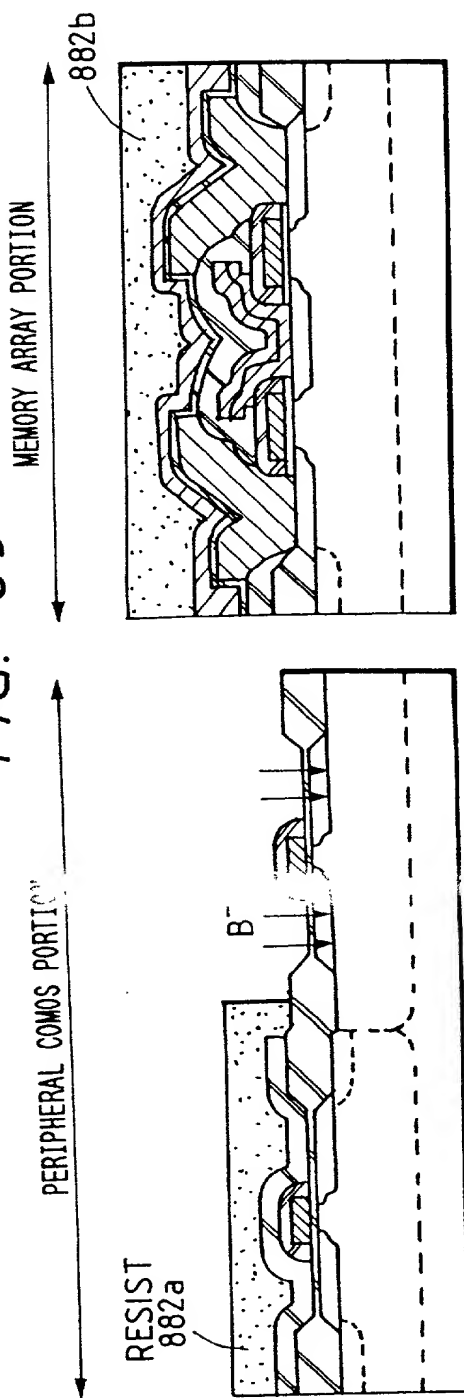


FIG. 8K

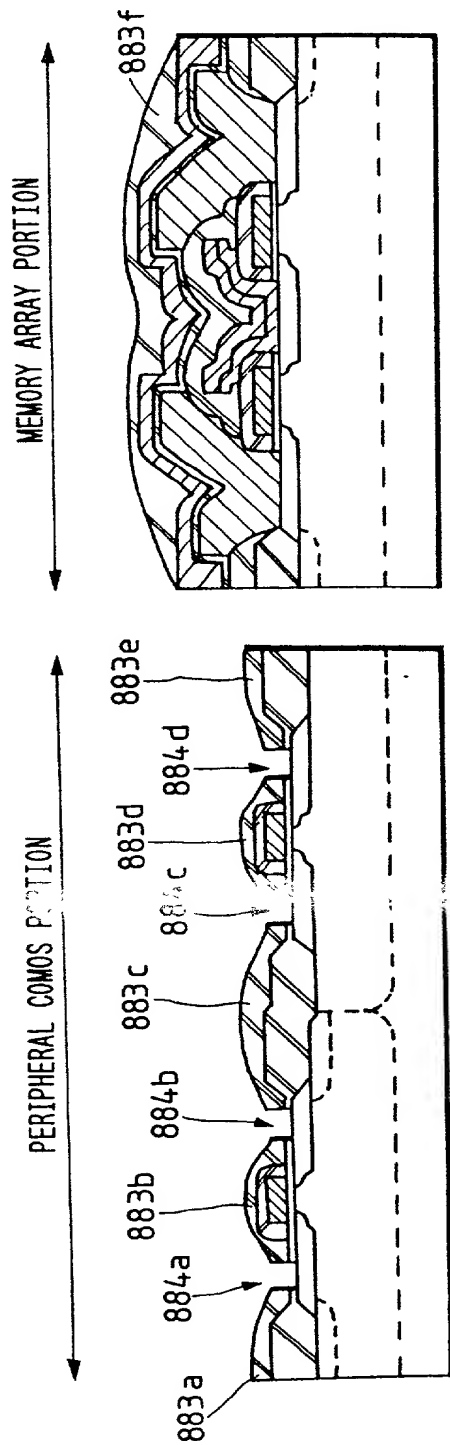


FIG. 8L

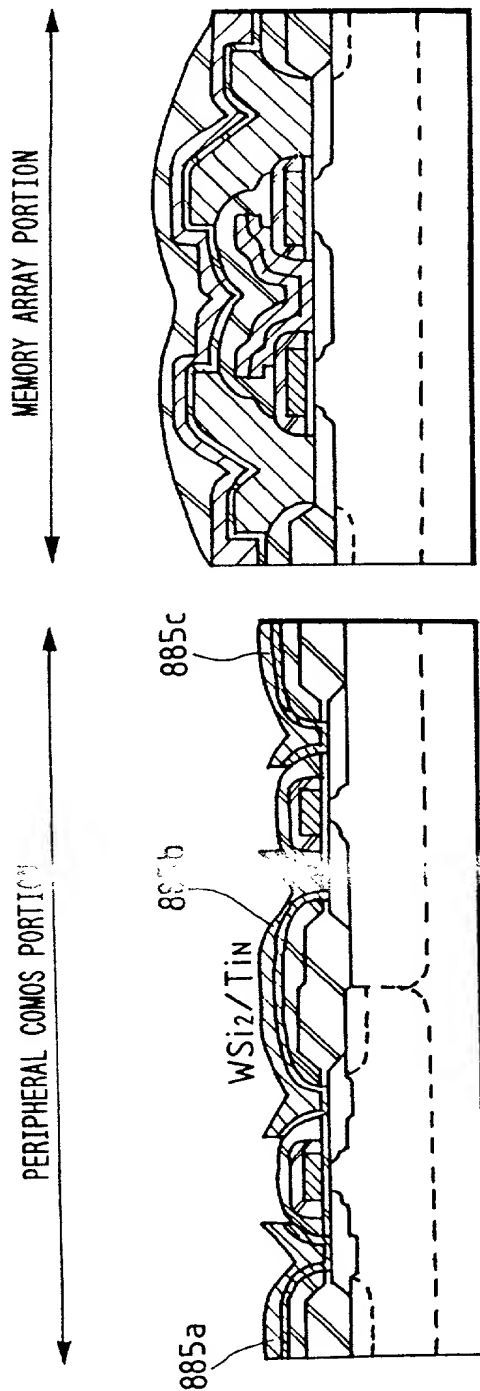


FIG. 8M

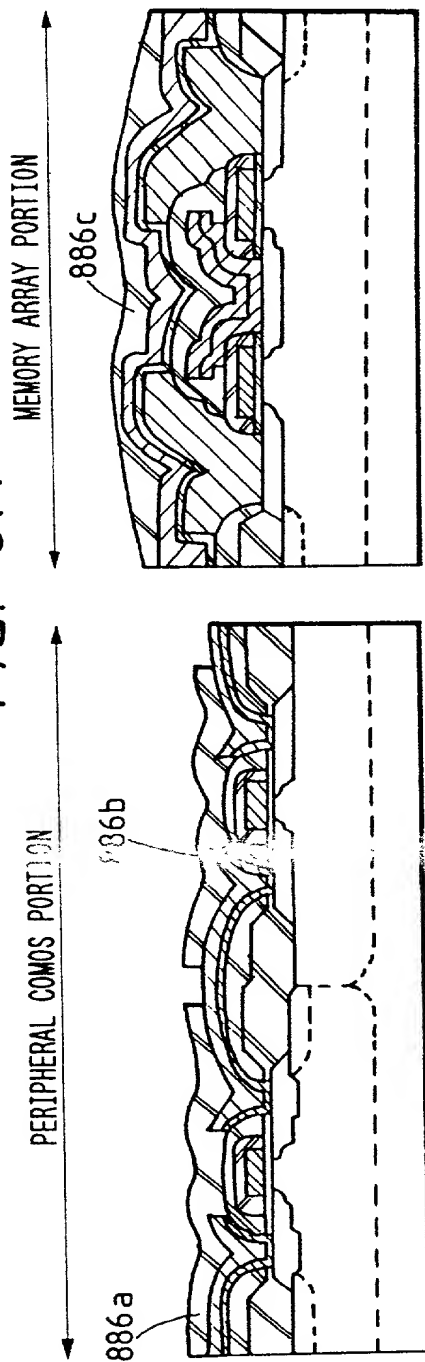
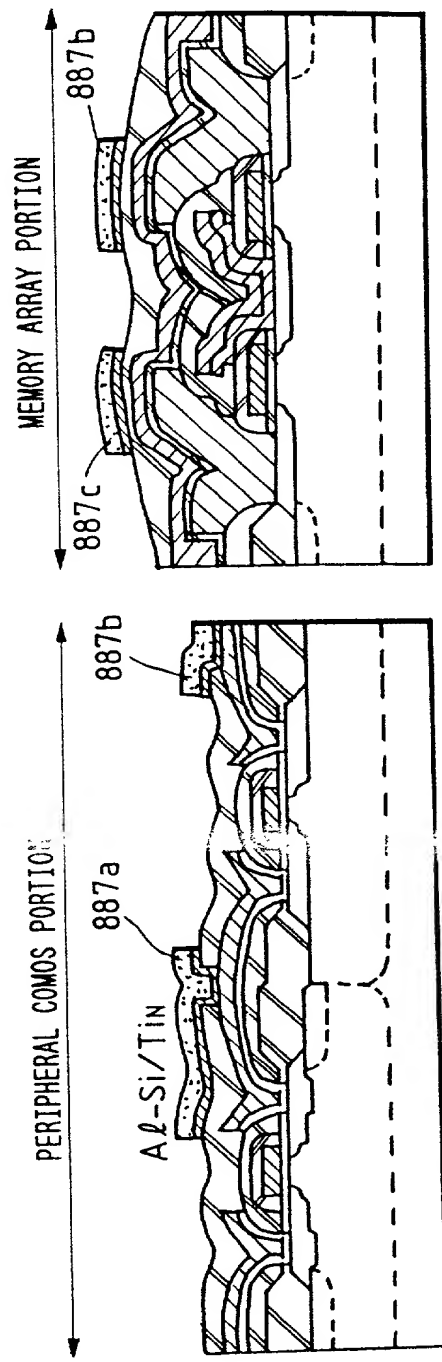


FIG. 8N



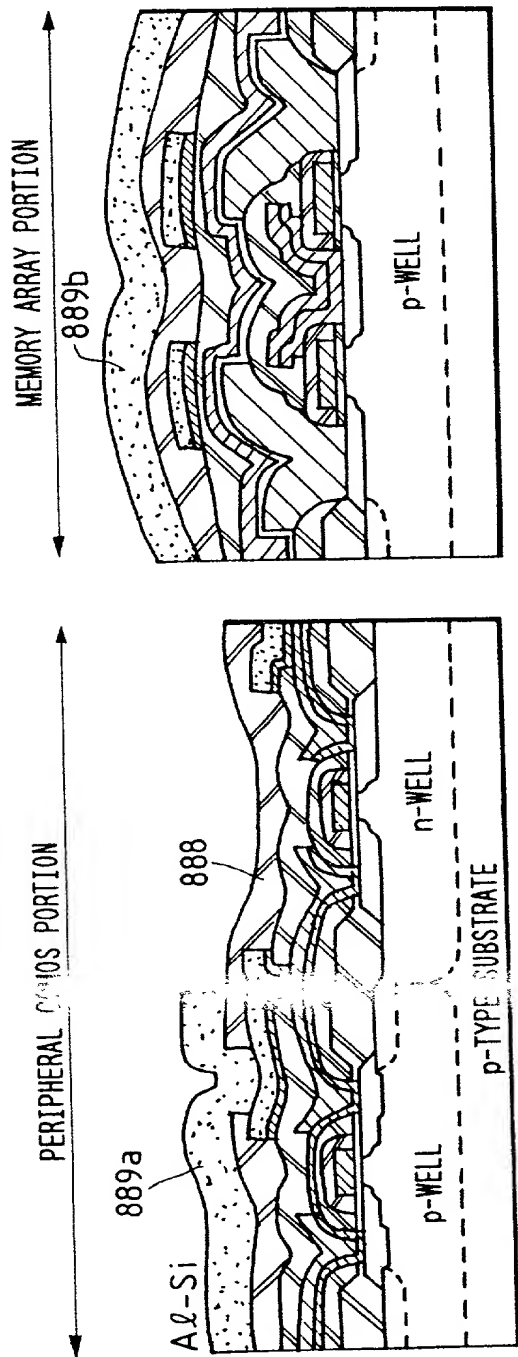


FIG. 80

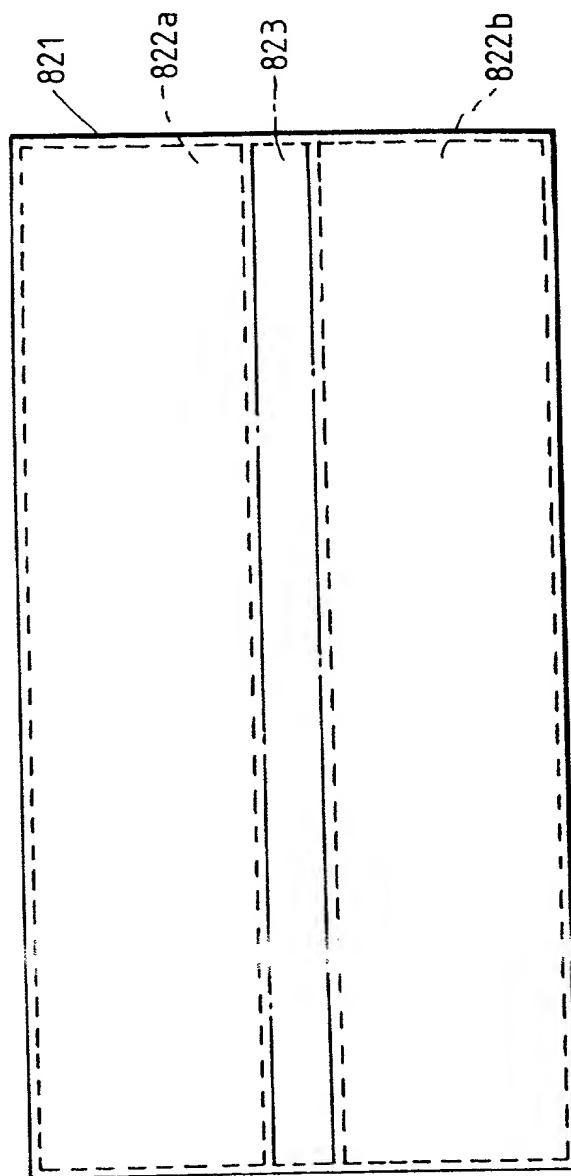


FIG. 8P

FIG. 8Q

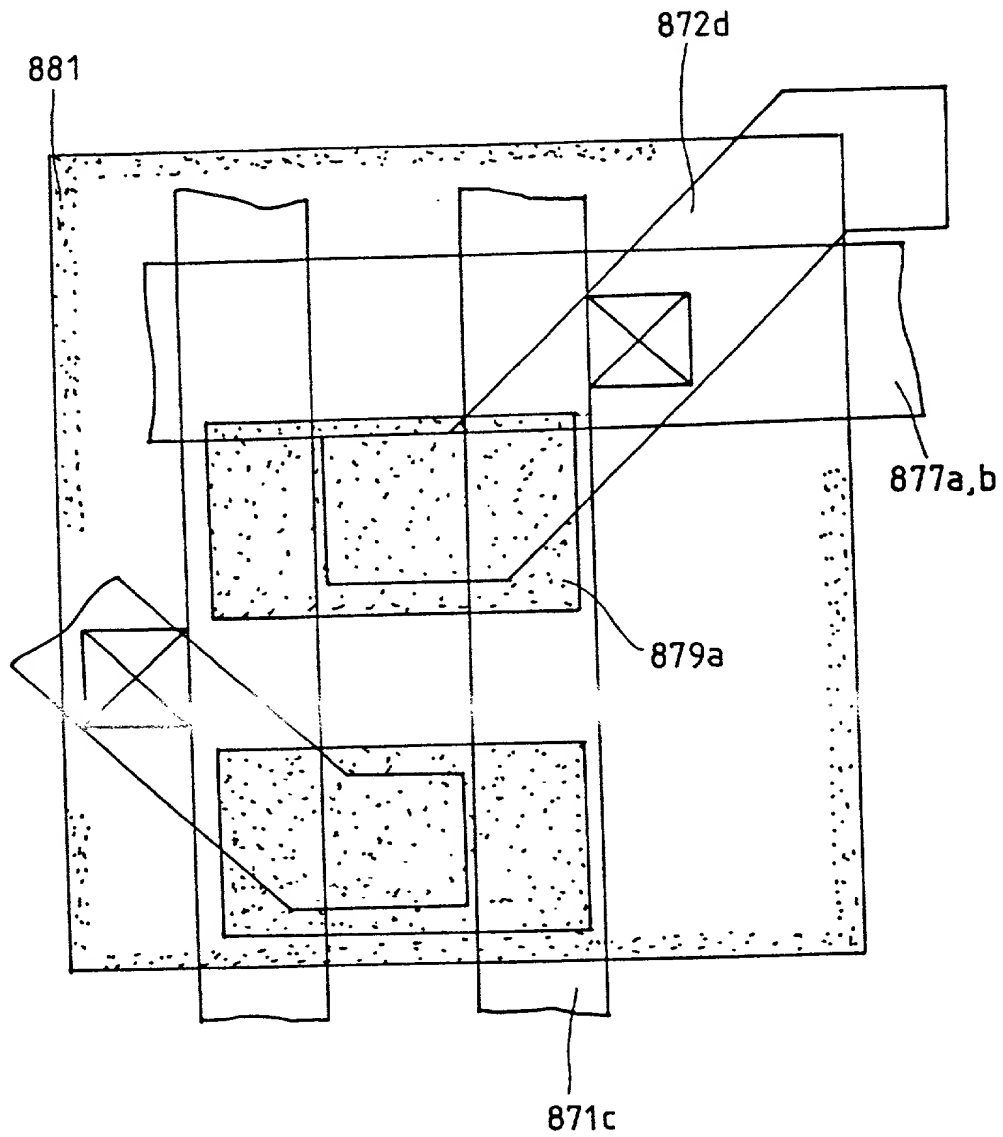


FIG. 9A

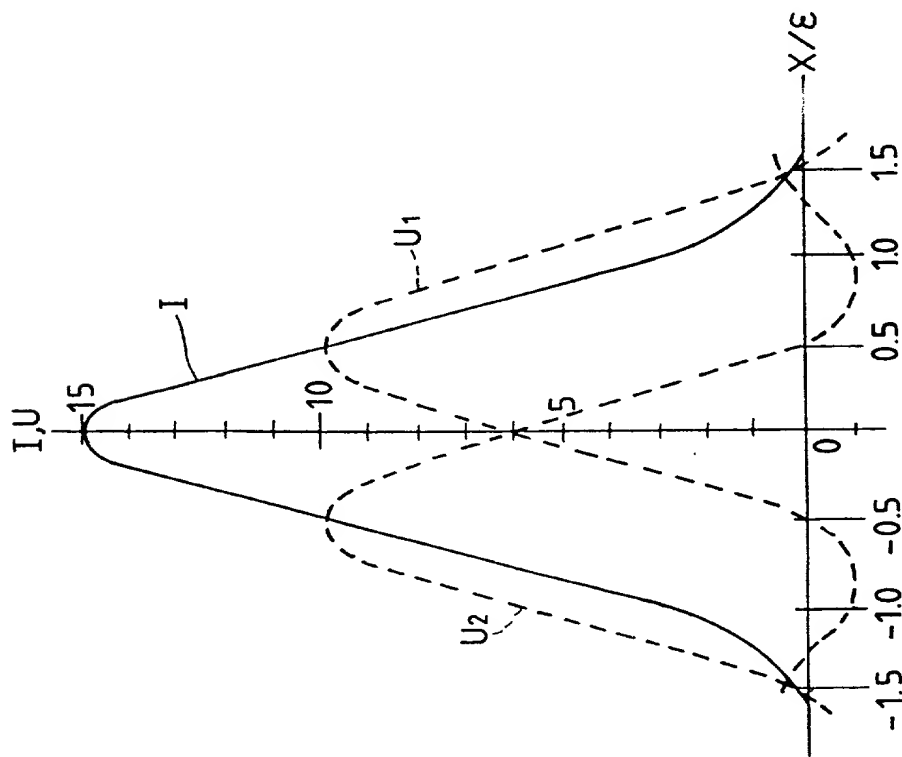


FIG. 9B

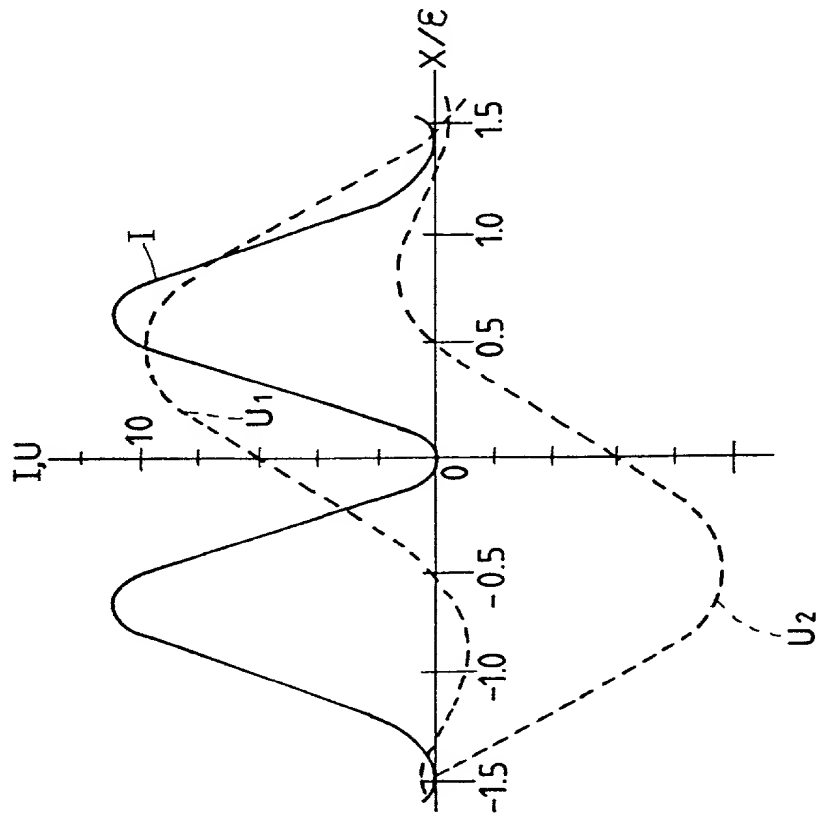


FIG. 9C

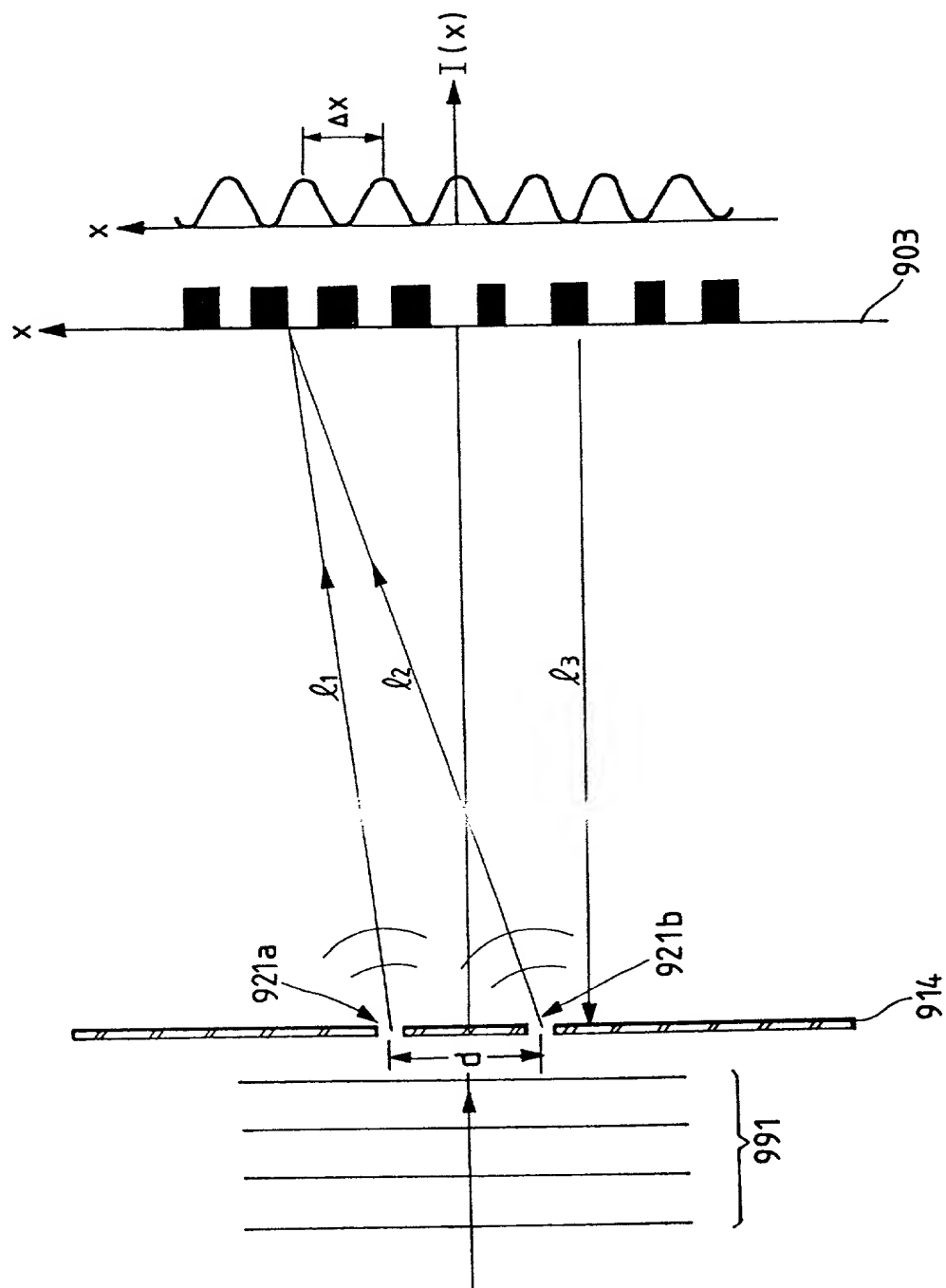


FIG. 10A

CONDITIONS LINE SOURCE	CENTER WAVELENGTH	BAND WIDTH	PARTIAL COHERENCE	REMARKS
I-LINE OF HIGH- PRESSURE Hg LAMP	365 nm	7~10 nm	0.2~1.1	
KrF EXCIMER LASER	248 nm	ABOUT 0.001 nm	0.2~1.1	DEEP UV REGION
ArF EXCIMER LASER	193 nm	DITTO	0.2~1.1	DITTO

FIG. 11A

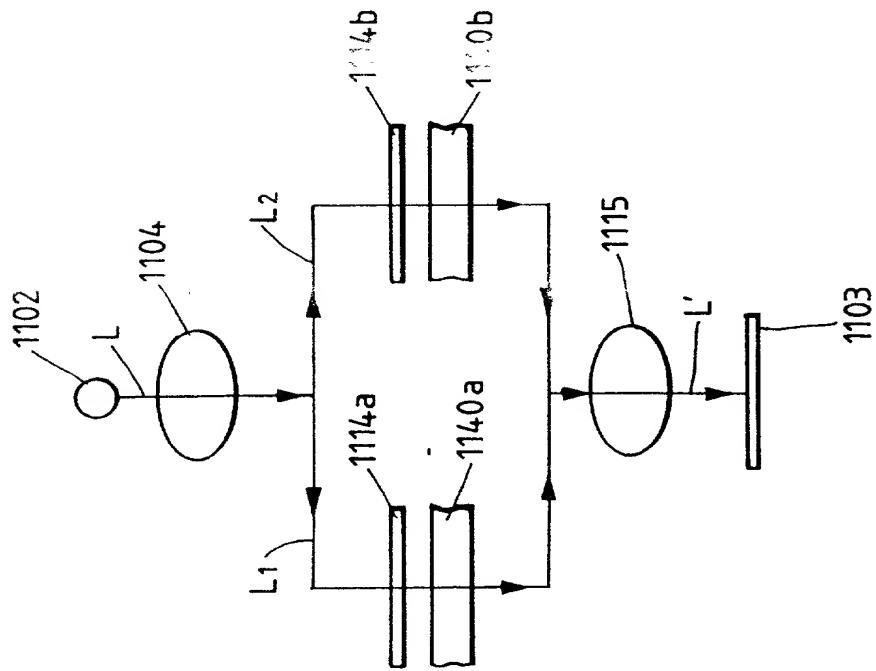


FIG. 12A

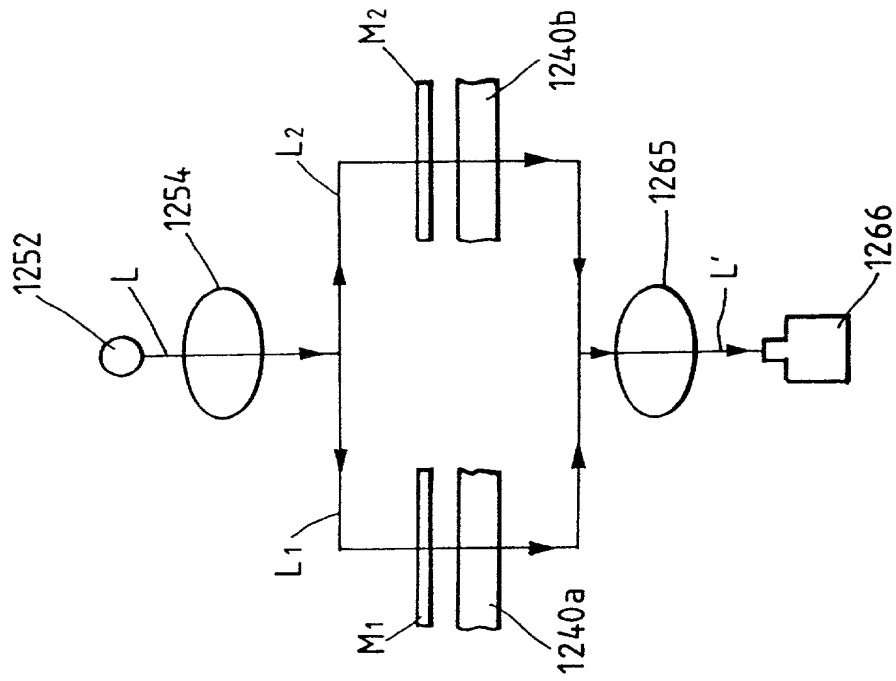


FIG. 13A

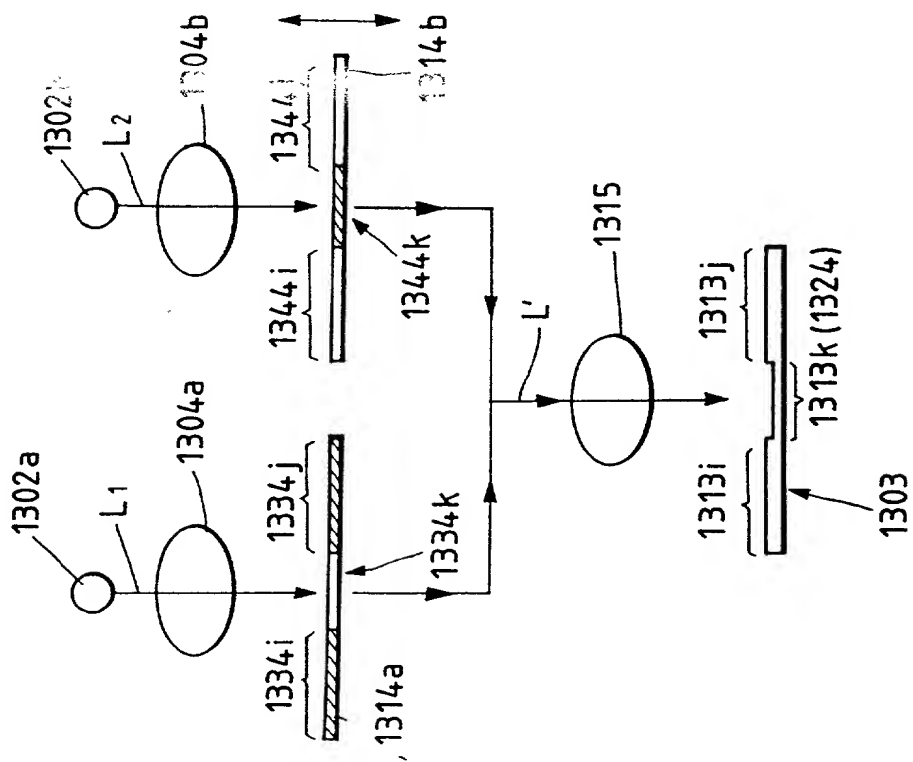


FIG. 13B

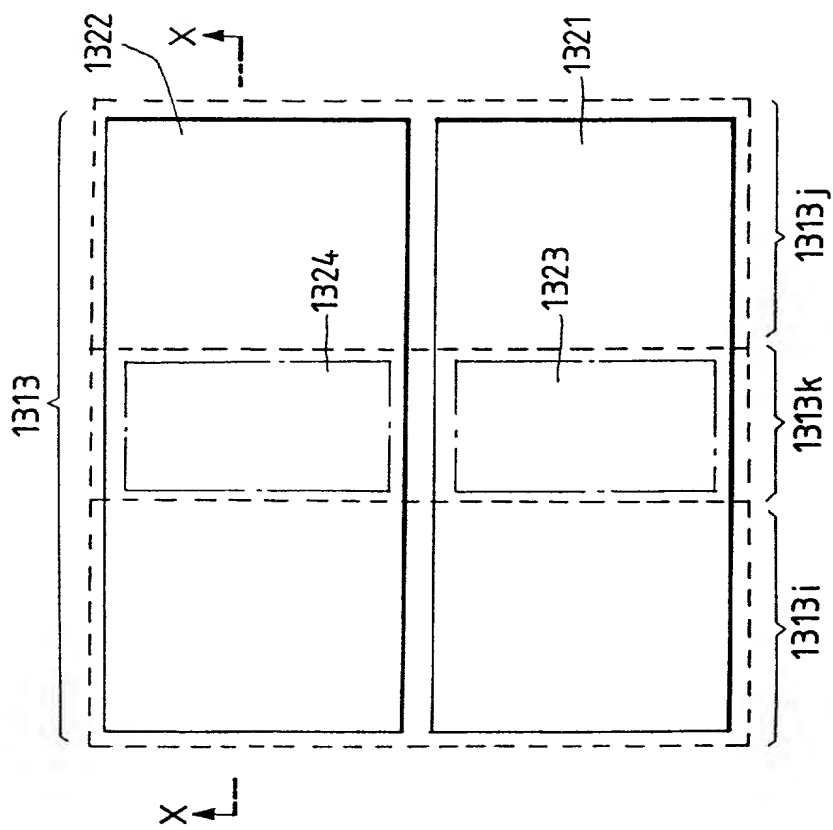


FIG. 14A

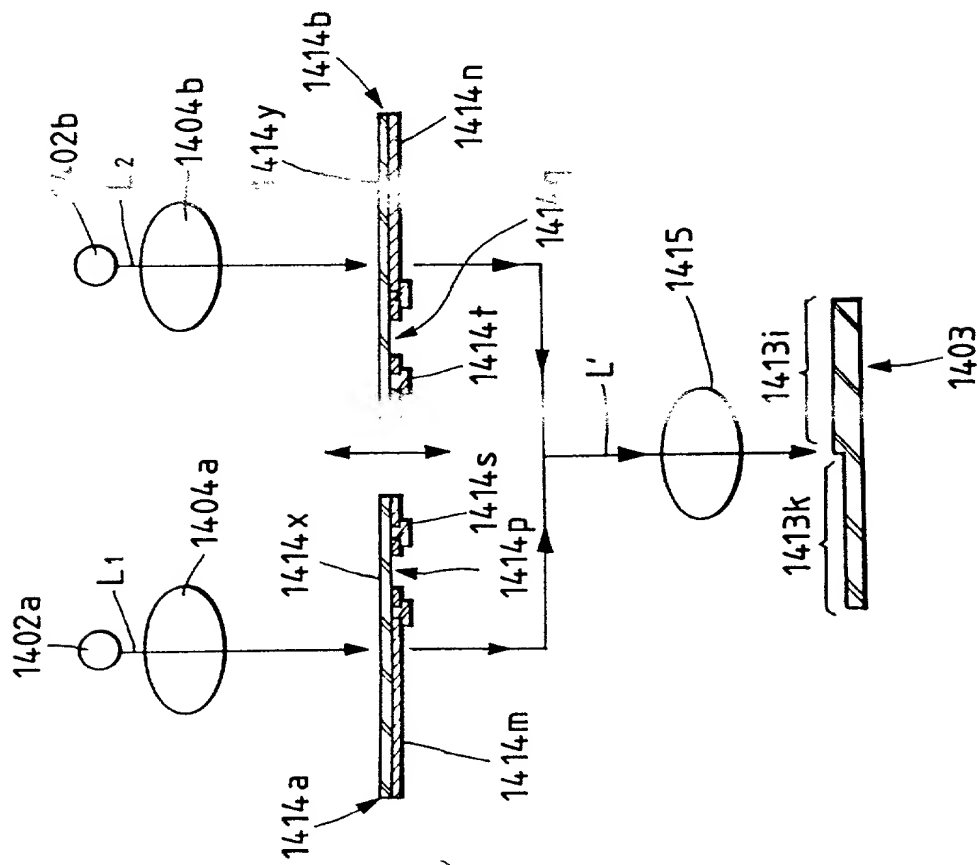


FIG. 14B

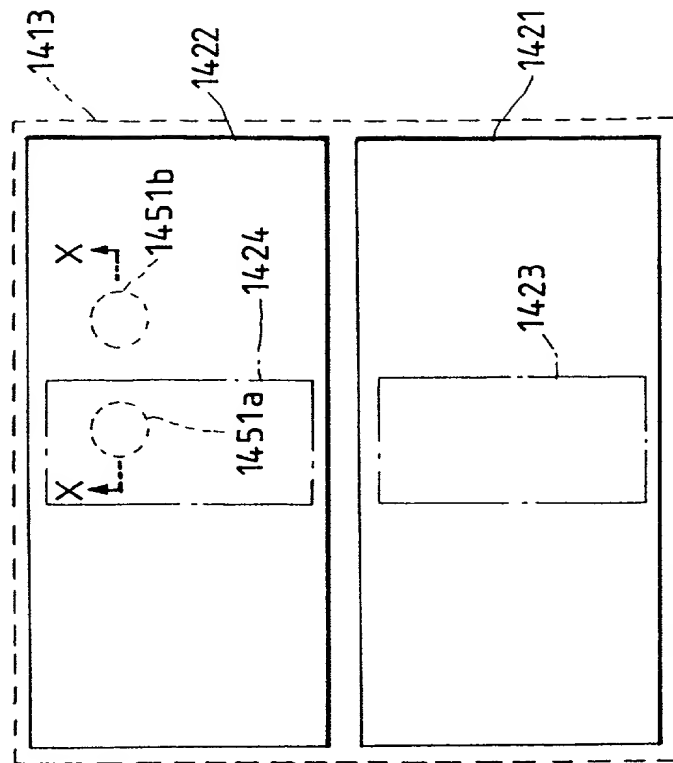


FIG. 14C

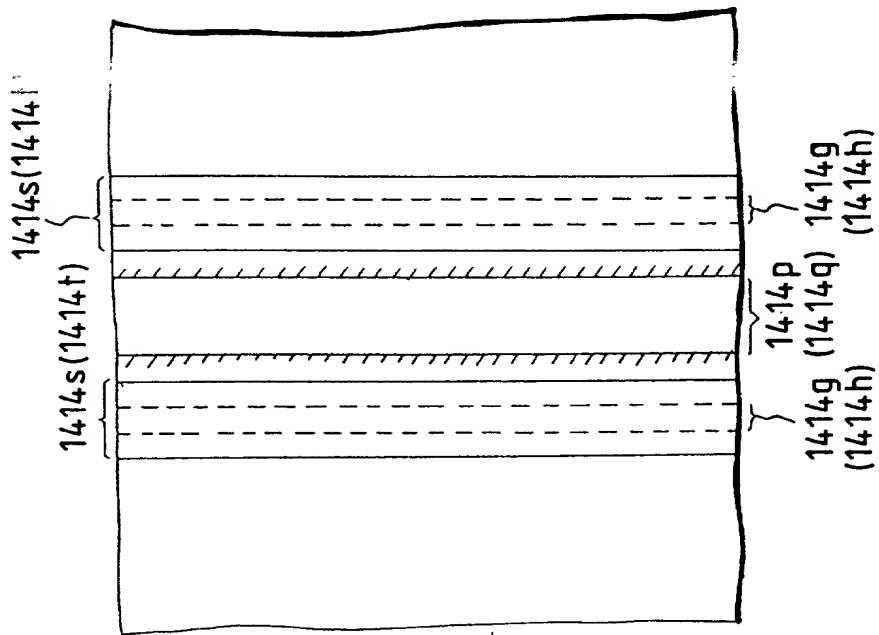


FIG. 15A

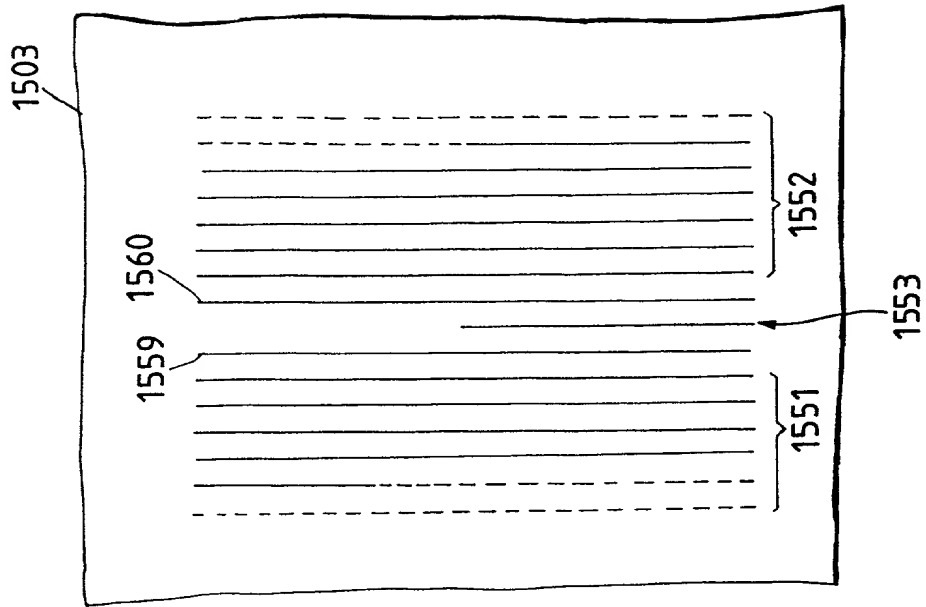


FIG. 15B

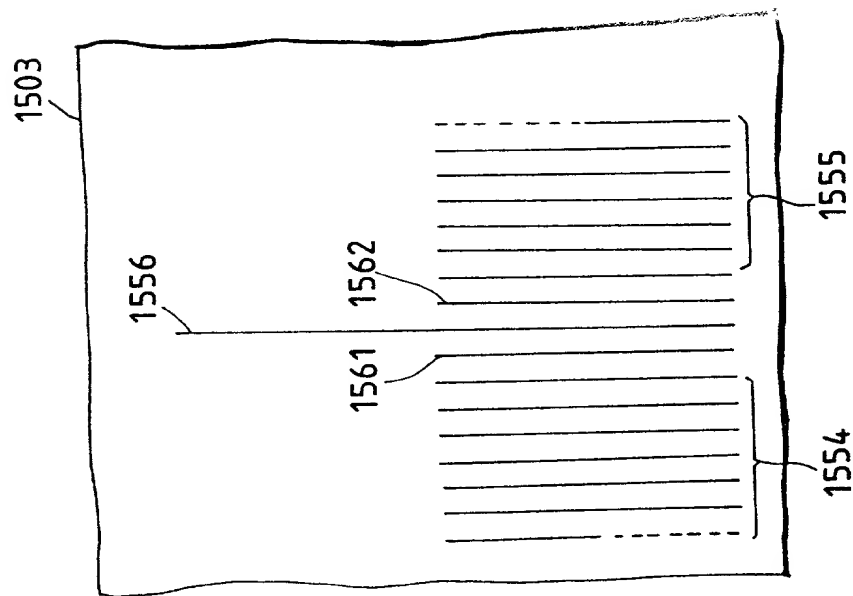


FIG. 15C

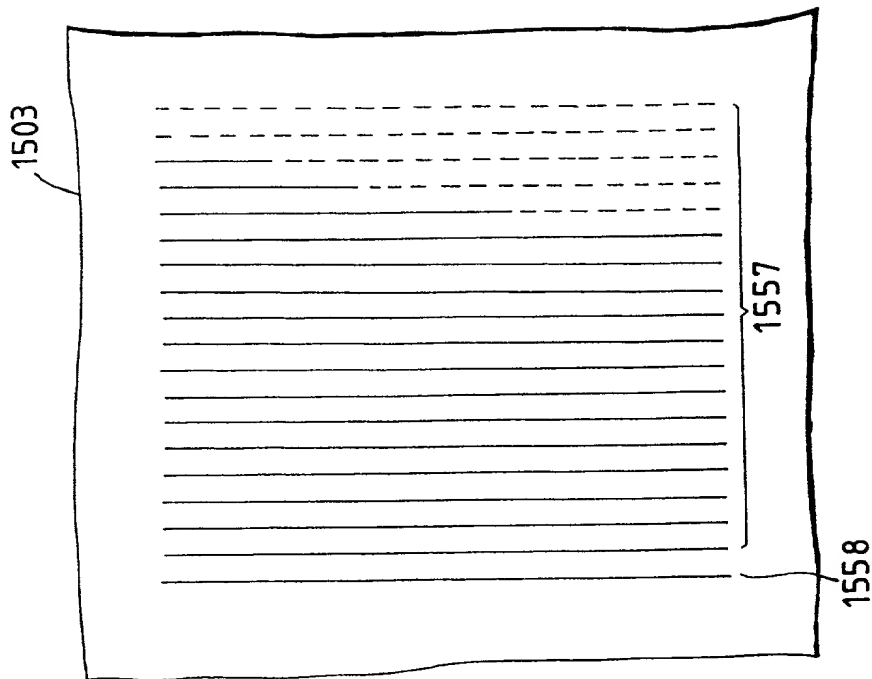


FIG. 15D

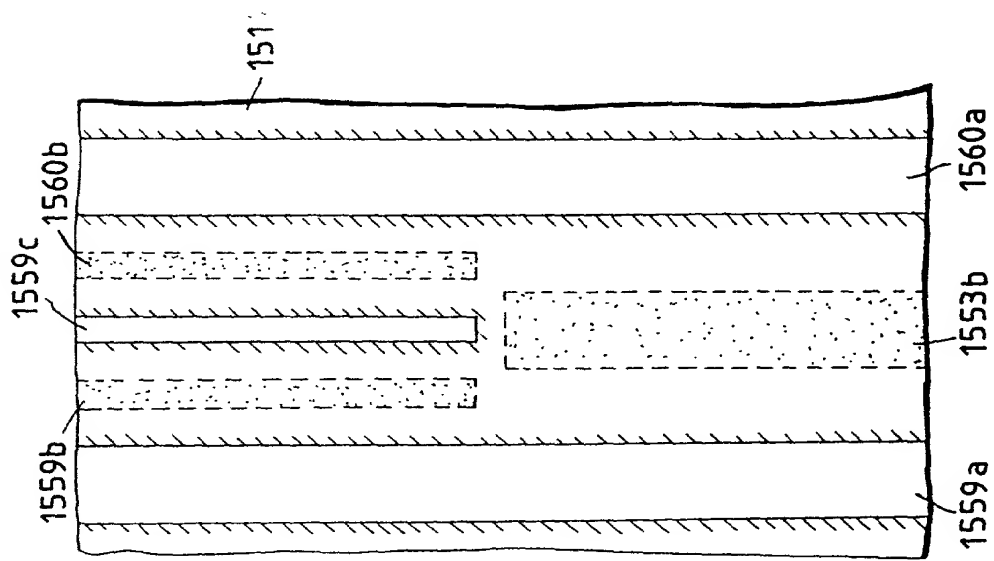


FIG. 15E

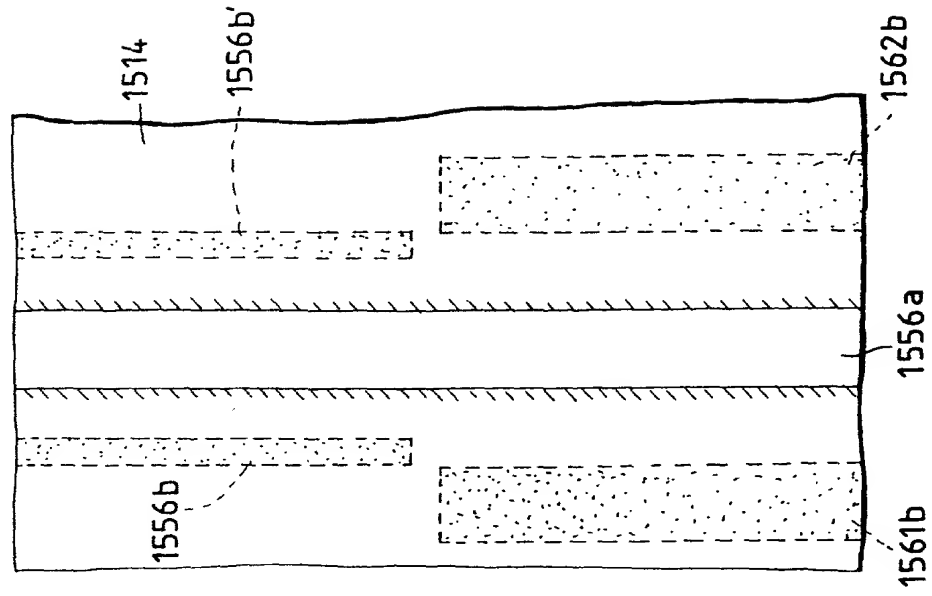


FIG. 15F

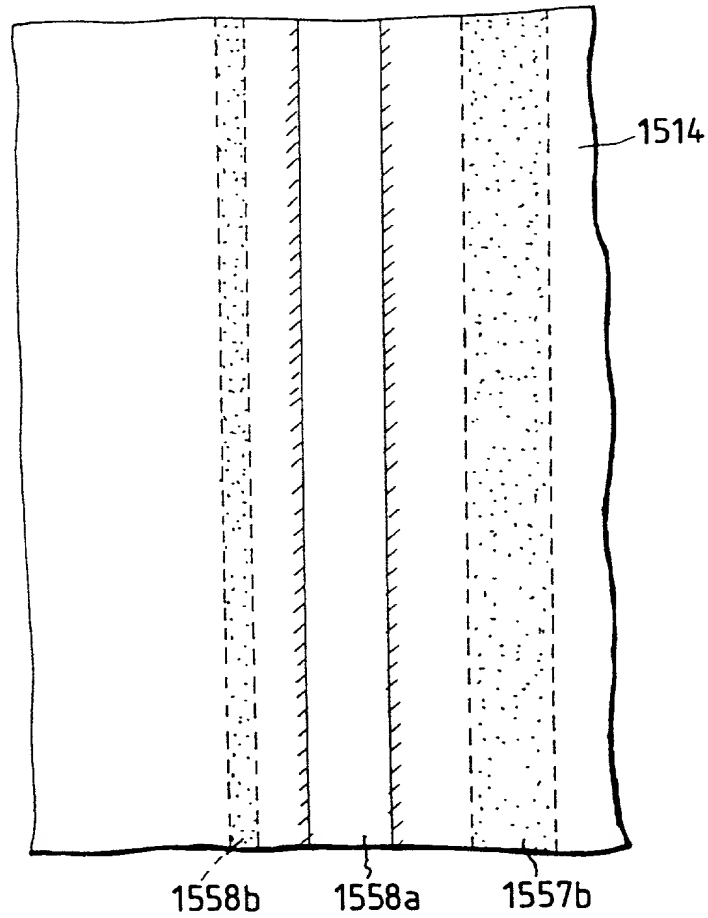


FIG. 16A

EXPOSURE BEAM \ RESIST NAME	POSITIVE RESIST	NEGATIVE RESIST
I-LINE (365nm)	① HITACHI KASEI 「RAY CAST RI-7000P」 ② SHIPLEY COMPANY INC. 「TITAN LINE SERIES」	① HITACHI KASEI 「RU1100N」 ② TOKYO OHKA KOGYO 「ONNR20 SERIES」
KrF EXCIMER LASER (248nm)	① POLYMETHYL METHACRYLATE (ABBREV. PMMA) ② SHIPLEY COMPANY INC. (MICROPOSIT)	① HITACHI KASEI 「RD2000N」 ② FUJI YAKUHHIN KOGYO 「LMR」

FIG. 17A

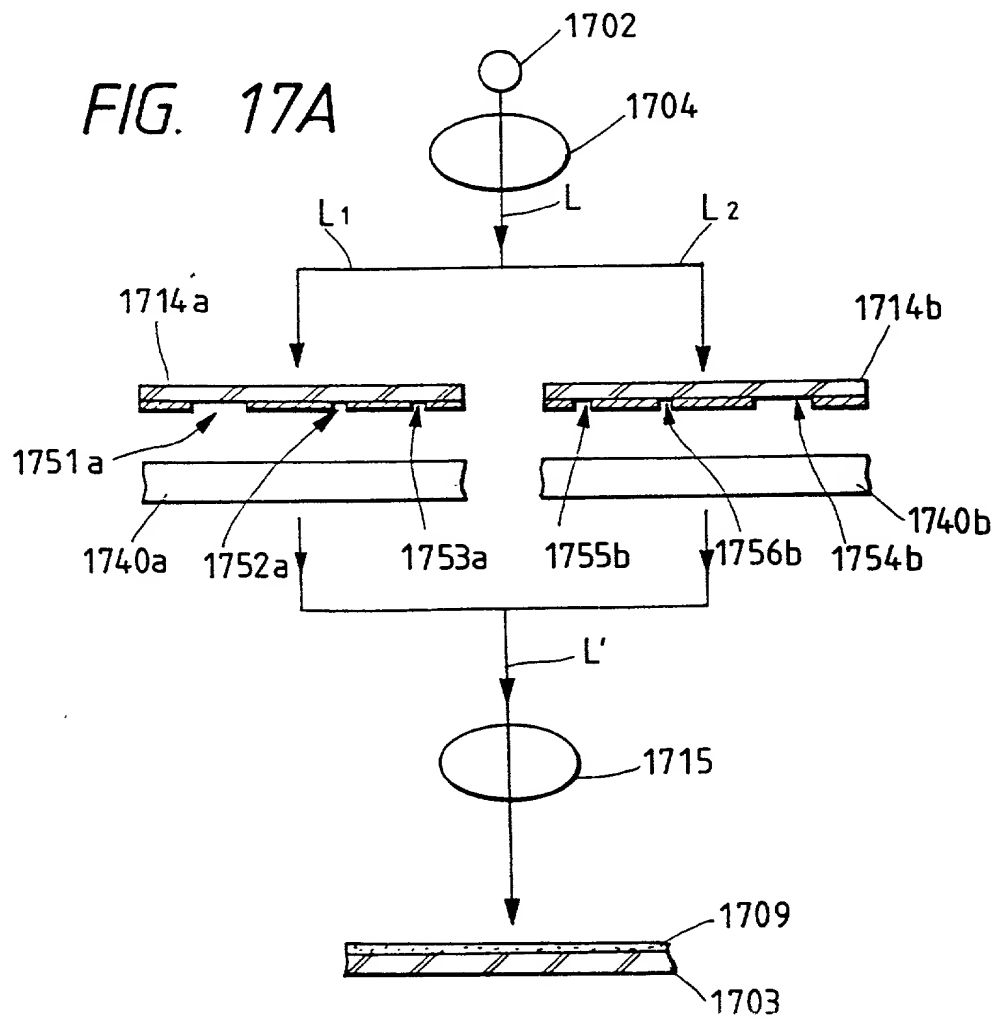


FIG. 17B

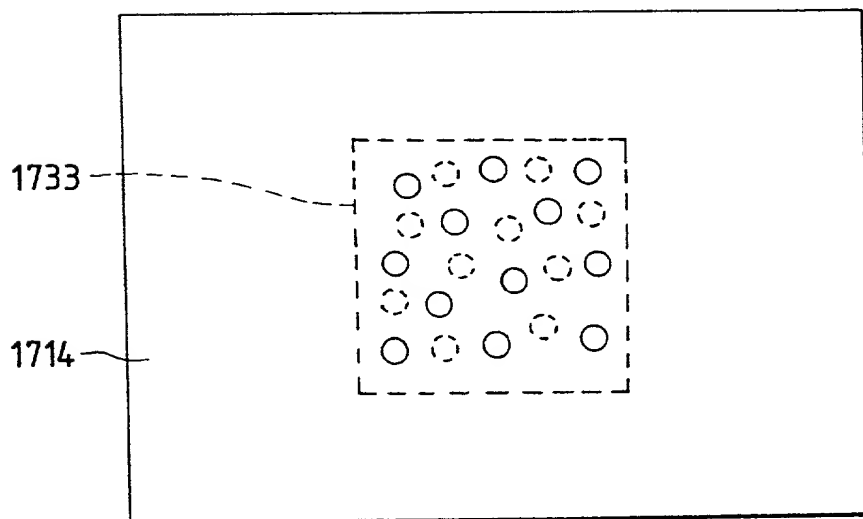


FIG. 18A

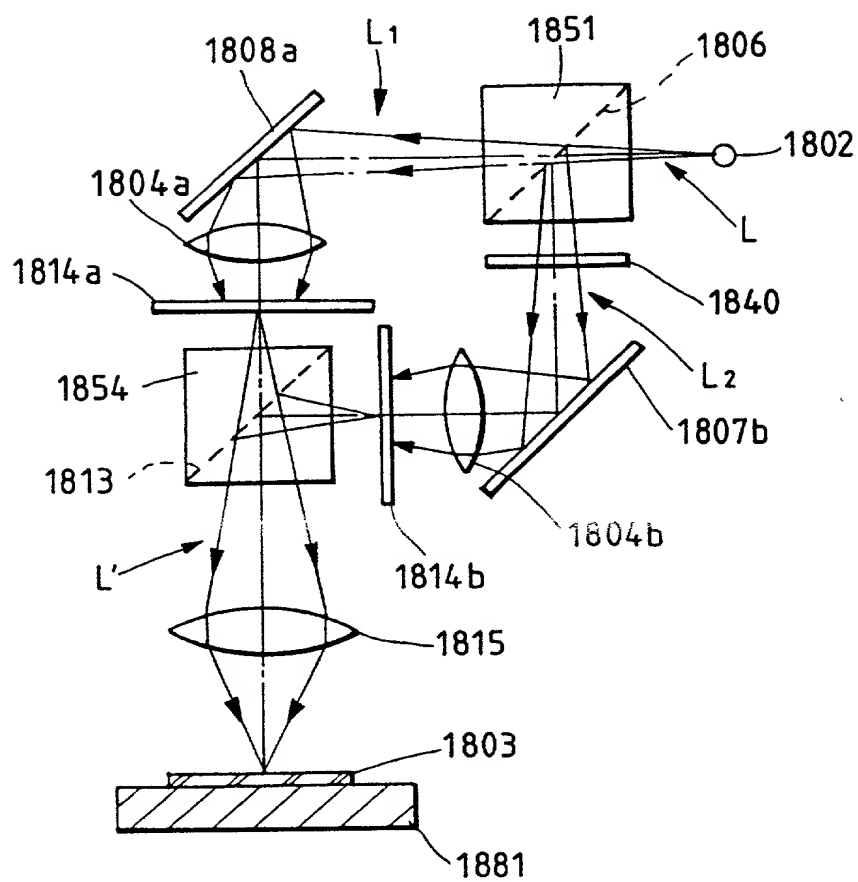


FIG. 19A

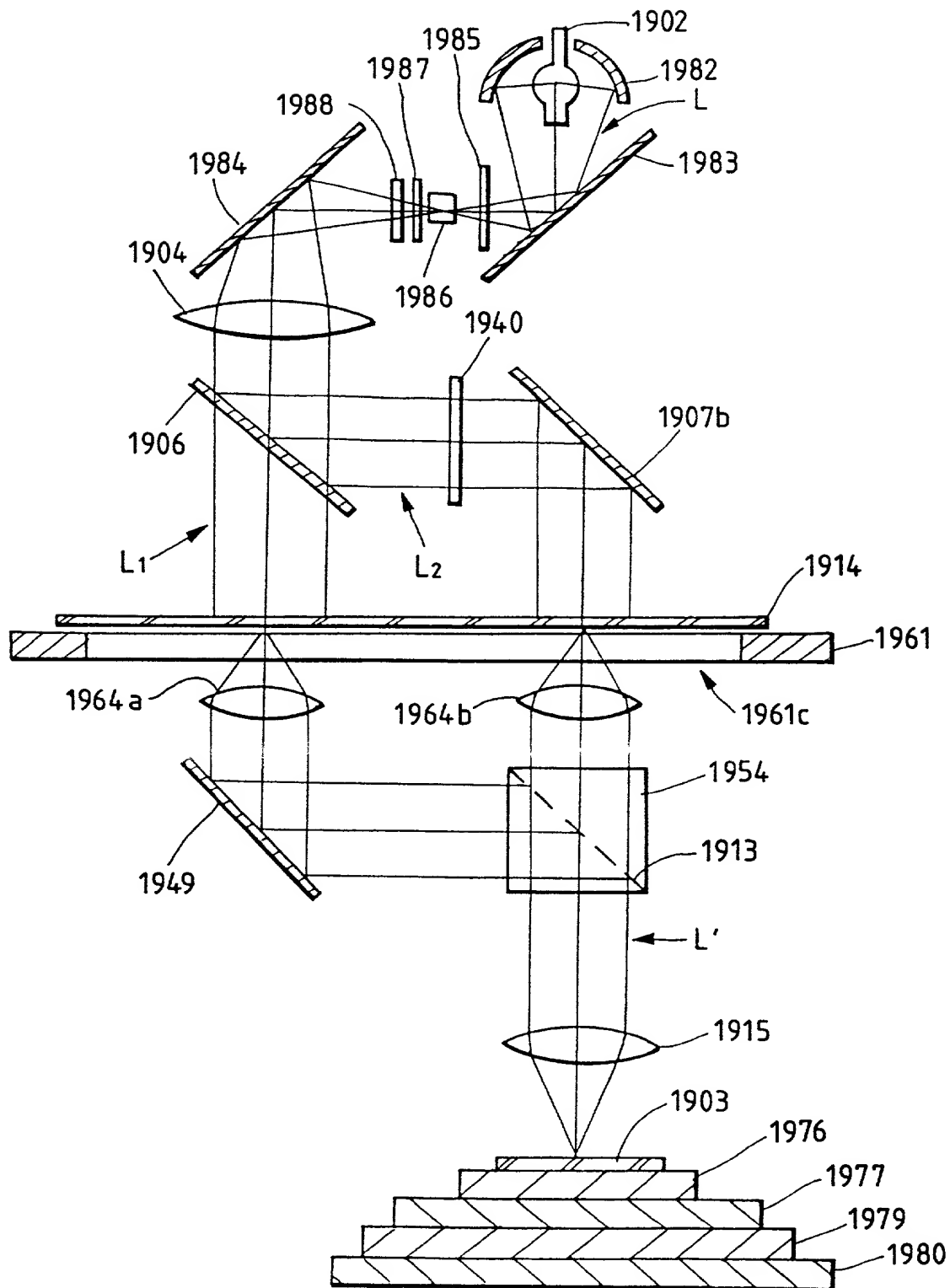


FIG. 20A

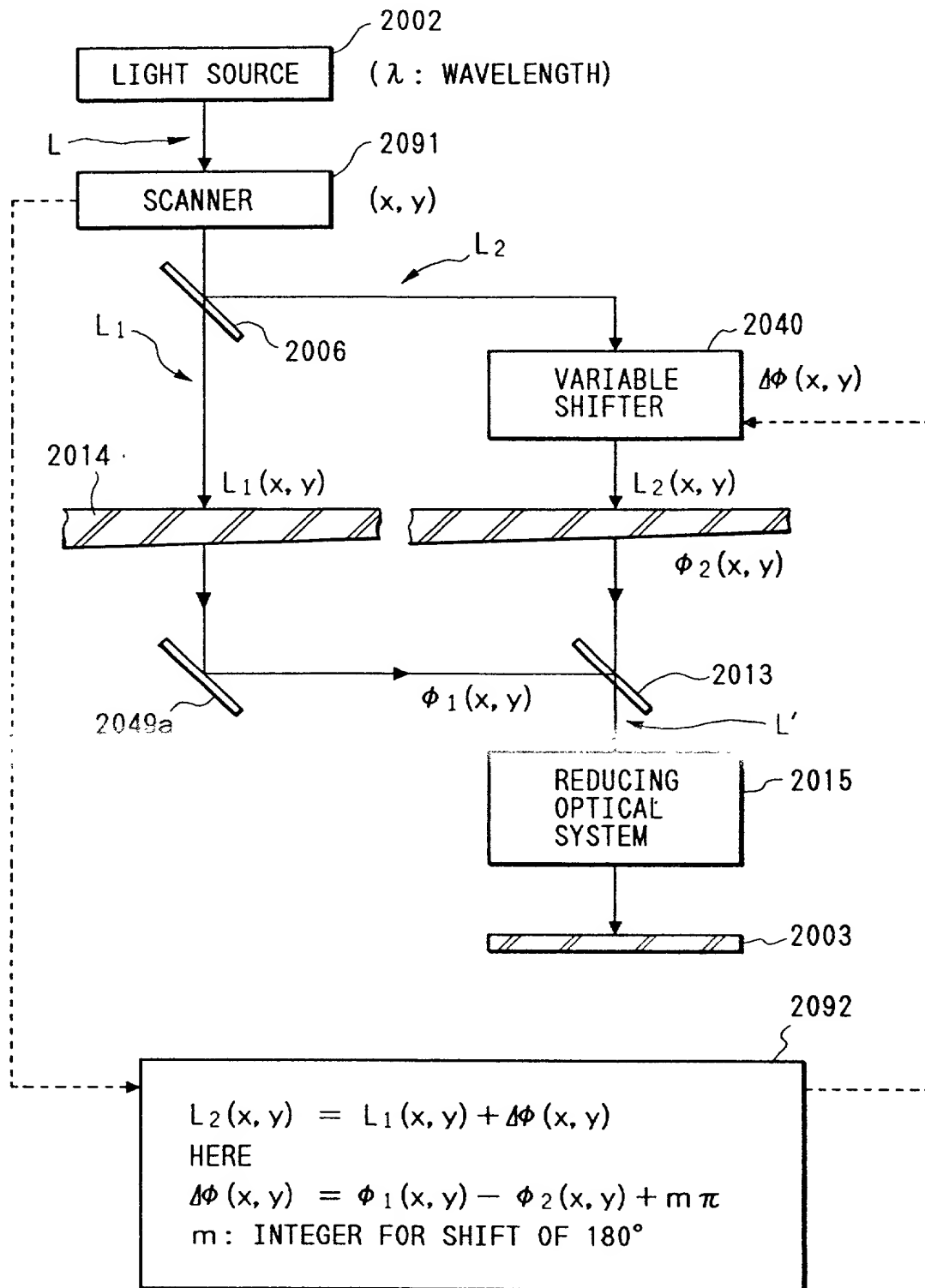


FIG. 20B

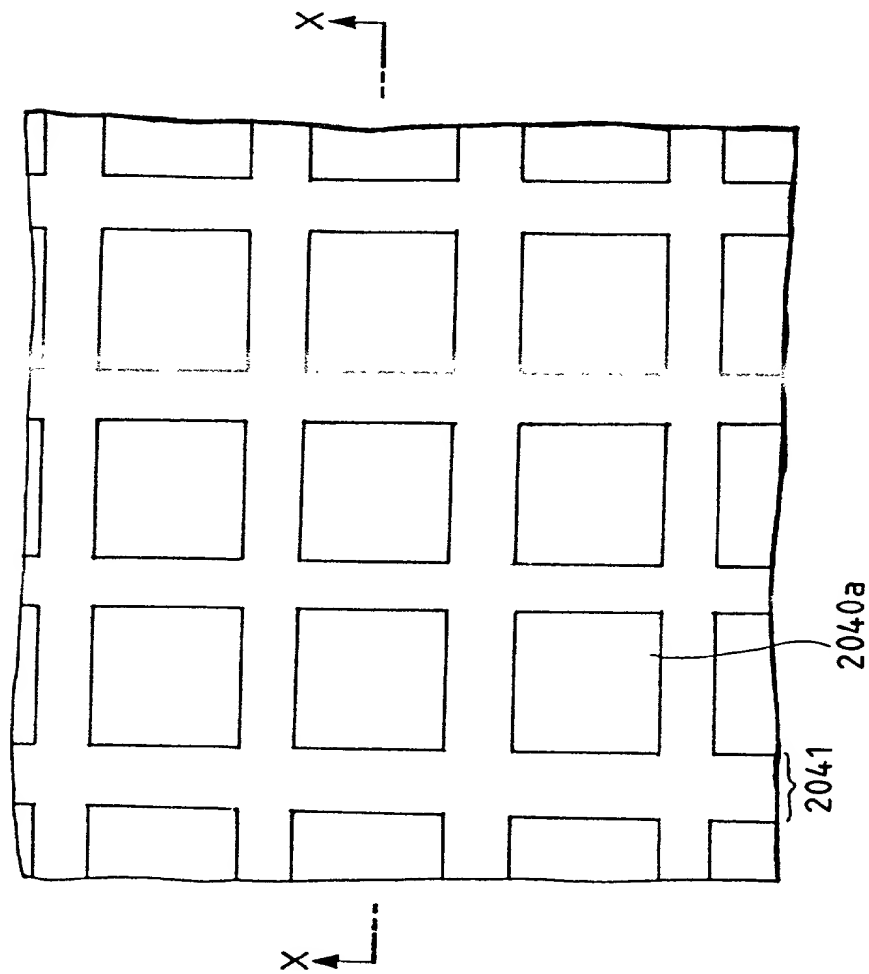


FIG. 20C

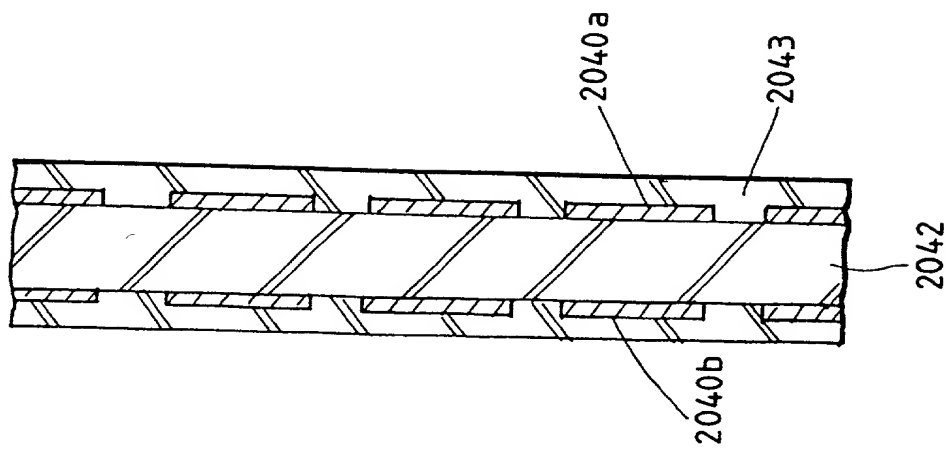


FIG. 20D

ABBREV.	CHEMICAL FORMULA	POINT GROUP	TRANSMISSIVE RANGE (μ m)
KDP	KH_2PO_4	42 m	0.27 ~ 1.7
DKDP	KD_2PO_4	42 m	0.2 ~ 1.6
ADP	$\text{NH}_4\text{H}_2\text{PO}_4$	42 m	0.13 ~ 1.7